



# भारत का राजपत्र The Gazette of India

प्राधिकार से प्रकाशित  
PUBLISHED BY AUTHORITY

सं० 37]  
No. 37]

नई दिल्ली, शनिवार, सितम्बर 14, 1991 (भाद्रपद 23, 1913)  
NEW DELHI, SATURDAY, SEPTEMBER 14, 1991 (BHADRA 23, 1913)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

## भाग III—खण्ड 2 [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस  
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

### THE PATENT OFFICE PATENTS AND DESIGNS

Calcutta, the 14th September, 1991

#### ADDRESS AND JURISDICTION OF OFFICES OF THE PATENT OFFICE

The Patent Office has its Head Office at Calcutta and Branch Offices at Bombay, Delhi and Madras having territorial jurisdiction on a zonal basis as shown below :—

Patent Office Branch,  
Toldi Estates, III Floor,  
Lower Parel (West),  
Bombay-400 013.

The States of Gujarat, Maharashtra and Madhya Pradesh and the Union Territories of Goa, Daman and Diu and Dadra and Nagar Haveli.

Telegraphic address "PATOFFICE".

Patent Office Branch,  
Unit No. 401 to 405, III Floor,  
Municipal Market Building,  
Saraswati Marg, Karol Bagh,  
New Delhi-110 005.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

Telegraphic address "PATENTOFIC".

Patent Office Branch,  
61, Wallajah Road,  
Madras-600 002.

The States of Andhra Pradesh, Karnataka, Kerala, Tamilnadu, and the Union Territories of Pondicherry, Laccadive, Minicoy and Aminidivi Islands.

Telegraphic address "PATENTOFIS".

Patent Office (Head Office),  
"NIZAM PALACE", 2nd M.S.O. Bldg.,  
5th, 6th and 7th Floor,  
234/4, Acharya Jagdish Bose Road,  
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

**Fees :—** The fees may either be paid in cash or may be sent by Money Order or Postal Order, payable to the Controller at the appropriate Offices or by Bank Draft or Cheque, payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

## पेटेंट कार्यालय

## एकसूच तथा अभिकल्प

कलकत्ता, दिनांक 14 सितम्बर 1991

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ता में स्थित है तथा बम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शाखा, टोडी हस्टेट,  
सीसरा तल, लोखर परेल (पश्चिम),  
बम्बई-400 013

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य क्षेत्र एवं संघ शासित क्षेत्र गोआ, दमन तथा दिव एवं दादरा और नगर द्विपेती।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय शाखा,  
इकाई सं० 401 से 405, सीसरा तल,  
नगरपालिका बाजार मधन,  
सरस्वती मार्ग, करोल बाग,  
नई दिल्ली-110 005

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान तथा उत्तर प्रदेश राज्य क्षेत्रों एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली।

तार पता—“पेटेंटोफिस”

## पेटेंट कार्यालय शाखा,

61, वालाजाह रोड,

मद्रास-600 002

आंध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य क्षेत्र एवं संघ शासित क्षेत्र पाण्डिचेरी, लक्षद्वीप, मिनिर्कोय तथा एमिनिदिवि द्वीप।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय (प्रधान कार्यालय),  
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय  
मधन 5, 6 तथा 7वां तल,  
234/4, आचार्य जगदीश बोस रोड,  
कलकत्ता-700 020

भारत का अवशेष क्षेत्र

तार पता—“पेटेंट्स”

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में अपेक्षित सभी आवेदन-पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

शुल्क :—शुल्कों की अदायगी या तो नकद की जाएगी अथवा उपयुक्त कार्यालय में नियंत्रक को भुगतान योग्य धनादेश अथवा डाक आवेद या जहाँ उपयुक्त कार्यालय स्थित है, उस स्थान के अनुसूचित बैंक से नियंत्रक को भुगतान योग्य बैंक ड्राफ्ट अथवा बैंक द्वारा की जा सकती है।

## CORRIGENDUM

In the gazette of India, Part-III, Section-2, dated the 17th August, 1991 under the heading APPLICATION FOR PATENTS FILED AT ..... etc. for application for Patent No. 463/Mas/91 delete “(India), Mysore Sandal Products” given after Girivas Viswanath Shet and delete “Which is a scheme meant to provide finance to virgin girls at the time of their marriage and which at the same time takes out the heavy burden from the shoulders of parents” given after Gandhi Marg Scheme.

In the gazette of India, Part-III, Section-2, dated the 7th September, 1991 under the heading Name Index of Application for Patents etc. in the portion of Applications filed in Delhi Branch, read the name of Applicants and its Application No. as 2C Corporation, 342/Del/91 before “A” deleting subsequent A.

GOVERNMENT OF INDIA  
THE PATENT OFFICE

Calcutta, the 14th September, 1991

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE  
234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20

The dates shown in the crescent brackets are the dates claimed under Section 135 of the Patents Act, 1970.

The 5th August, 1991

587/Cal/91 E.I. Du Pont De Nemours and Company. Preparation of anhydrous niobium and tantalum pentafluorides.

588/Cal/91 Siemens Aktiengesellschaft. Arrangement for connecting bus bars.

589/Cal/91 Personal Products Co. Fluid barrier seat for sanitary napkin having protecting flaps.  
[Divisional dated 21st July, 1988]

590/Cal/91 Goldstar Co. Ltd. Method for winding a high-voltage coil for a flyback transformer.

591/Cal/91 Snow Brand Milk Products Co. Ltd. Novel isoquinoline derivatives and salts thereof.

The 6th August, 1991

592/Cal/91 Mcneil-Ppc, Inc. An absorbent material, a method of obtaining an absorbent material, an absorbent pad, a method of obtaining an absorbent pad, and a disposable absorbent article.

593/Cal/91 Stefan Karp. Improvements on non-uniform torque transmitting mechanisms such as bicycle chain wheel acts.  
[Convention dated 6th August, 1990; No. 9017226. 3, U.K.]

The 7th August, 1991

594/Cal/91 Trutzschler Gmbh & Co. Kg. A device for the removal of hoop-casings, eg wires, strips, bandages and similar others and/or packing of textile raw material bales.

595/Cal/91 Trutzschler GmbH & Co. Kg. A procedure and device for the separation of hoop-casings, eg wires, strips, bandages and/or packing of textile fibre bales.

596/Cal/91 Telefonica De Espana S.A. Validation and identification unit maintenance terminal.

The 8th August, 1991

597/Cal/91 Sotac Corporation. A method of coating seeds and to seeds coated thereby.  
[Divisional dated 4th July, 1988]

598/Cal/91 Kamyr, Inc. Gas sparged centrifugal separation and/or mixing.

The 9th August, 1991

599/Cal/91 Fritz Stahlecker and Hans Stahlecker. A spinning machine.

600/Cal/91 Fritz Stahlecker and Hans Stahlecker. A spinning machine.

601/Cal/91 Caroma Industries Limited. A valve.  
[Convention dated 9th August, 1990; No. PK 1661; Australia]

APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, MUNICIPAL MARKET BUILDING, THIRD FLOOR, KAROL BAGH, NEW DELHI-5

The 1st July, 1991

579/Del/91 Dresser Industries, Inc. "Safety relief valve".

580/Del/91 Shell Internationale Research Maatschappij B.V. "Hydrocarbon oil compositions".

The 2nd July, 1991

581/Del/91 Thumswamy Joseph David. "Centralised/computerised/monitored—on the back moving farming machine and system"

582/Del/91 Thumswamy Joseph David. "Rope way ferry system".

583/Del/91 The Procter & Gamble Co. "Improved process for producing a mechanical fastener and a mechanical fastener produced thereby".

584/Del/91 Asea Brown Boveri AB. "Sheet-wound coils".

585/Del/91 BP Chemicals Ltd. "Process and device for introducing a powder into a vessel".

586/Del/91 Otsuka Kagaku Kabushiki Kaisha. "Novel-process for producing semicarbazide".

587/Del/91 Allied-Signal Inc. "Apparatus and method of fabricating a monolithic solid oxide fuel cell".

The 3rd July, 1991

588/Del/91 Steel Authority of India Ltd. "A device for controlling the crop length of hot bars or blooms produced at the primary mills of a steel plant".

589/Del/91 Digital Equipment Corporation. "Methods and apparatus for accessing non-relational data files using relational queries".

590/Del/91 Alstom. "A device for operating a railroad switch".

591/Del/91 Colgate-Palmolive Co. "Anti-plaque and anti-tartar dentifrices in plastic pump dispensers".

592/Del/91 Colgate-Palmolive Co. "Anti-plaque dentifrices packaged in resilient squeezable dispensing container".

593/Del/91 Orbital Engine Co. (Australia) Pty. Ltd. "An apparatus for delivering fuel to an internal combustion engine".  
[Convention dated 3rd April, 87, 20th July, 87 & 26th October, 87 (Australia)]  
[Divisional dated 4th April, 1988].

The 4th July, 1991

594/Del/91 M/s. Ranbaxy Laboratories Ltd. "A new process for the preparation of 1,4-dihydro-1-ethyl-6-fluoro-4-oxo-7-(1-piperazinyl) quinoline-3-carboxylic acid derivatives".

595/Del/91 Council of Scientific & Industrial Research. "A process for the preparation of zebra connectors using conducting polymer-composites/blends".

596/Del/91 Concentric Pumps Ltd. "Improvements in gerotor pumps".  
[Convention dated 11th July, 90; (U.K.)]

The 4th July, 1991

597/Del/91 Imperial Chemical Industries PLC. "Anionic compounds".  
[Convention dated 26th July, 90; (U.K.)]

598/Del/91 Imperial Chemical Industries PLC. "Anionic compounds".  
[Convention dated 26th July, 90; (U.K.)]

599/Del/91 Imperial Chemical Industries PLC. "Anionic compounds".  
[Convention dated 26th July, 90; (U.K.)]

The 5th July, 1991

600/Del/91 Tata Energy Research Institute. "A drier for drying of cash crops".

601/Del/91 Tata Energy Research Institute. "A process for the production of fuel briquettes from agricultural wastes".

602/Del/91 UTDC Inc. "A linear motor in-track transit system".

603/Del/91 Warner Lambert Co. "One-piece flexible razor head".

The 8th July, 1991

604/Del/91 Sat Pal Choudhary (Retd). "Thermostat for use in electrical appliance called electric iron".

605/Del/91 Donald D. Hickey & Other. "Method and apparatus for the measurement of atrial pressure".

606/Del/91 Cosmo Films Ltd, "A process for the preparation of synthetic paper".

607/Del/91 Cosmo Films Ltd, "A process for the preparation of synthetic paper".

608/Del/91 Cosmo Films Ltd, "A process for the preparation of synthetic paper".

609/Del/91 Atchem, "A process for the preparation of vinyl chloride homo-and copolymers in the form of a latex containing monodisperse particles".  
[Divisional dated 11th March, 1988]

610/Del/91 Mobil Solar Energy Corporation, "Method of applying metallized contacts to a solar cell".

611/Del/91 Imperial Chemical Industries PLC, "Spray drying".  
[Convention dated 3rd August, 1990; (U.K.)]

612/Del/91 Torotrak Development Ltd, "Improvements in or relating to transmissions of the toroidal-race rolling-track type".  
[Convention dated 13th July, 1990; (U.K.)]

613/Del/91 AMP Incorporated, "Optical fiber coupler of improved signal distribution characteristics".

614/Del/91 Jean-Pierre Michaux, "A handling device of agricultural products, notably of sugar cane".

The 9th July, 1991

615/Del/91 Scapa Group PLC, "Engless belt for extended nip dewatering presses".  
[Convention dated 28th July, 90 (U.K.)]

616/Del/91 Drägerwerk Aktiengesellschaft, "Cooling device for cooling breathing gas in a respiratory protection device".

617/Del/91 Aktiebolaget Astra, "New Chemical Products".

The 10th July, 1991

618/Del/91 General Singal Corporation, "Mixing impellers and impeller systems for mixing and blending liquids and liquid suspensions having a wide range of viscosities".

The 11th July, 1991

619/Del/91 PPG Industries, Inc, "A transparent sheet and method of producing the same".  
[Divisional dated 14th March, 1988].

620/Cal/91 The Lubrizol Corporation, "A lubricating oil composition".  
[Divisional dated 28th April, 1988].

621/Del/91 National Council for Cement & Building Materials, "A system for use with a single or a plurality of vertical shaft kilns".

The 12th July, 1991

622/Del/91 J.D. Khetrapal & Others, "A device for water treatment by inverted filtration".

623/Del/91 J. D. Khetrapal & Others, "Disposal pond for treated effluent/waste water".

624/Del/91 E.R. Squibb & Sons, Inc, "Sulfur-substituted mevinic acid derivatives".

625/Del/91 Union Carbide Industrial Gases Technology Corporation, "Multiple bundle fluid separation apparatus".

APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH AT TODI ESTATES, 3RD FLOOR, SUN MILL COMPOUND, LOWER PAREL(E), BOMBAY-13

The 1st July, 1991

192/Bom/91 Mr. John-Philip, Mr. Balwant Singh, "Novel-Timer".

The 2nd July, 1991

193/Bom/91 Hindustan Lever Ltd., 3rd July 90, Gr. Britain, "Tea process".

194/Bom/91 Hoechst India Limited, "Novel arylcycloalkanol derivatives as medicaments in the treatment of inflammatory conditions".

The 5th July, 1991

195/Bom/91 Eagle Flask Industries Ltd., "An interlocking collapsible glass unit".

196/Bom/91 Eagle Flask Industries Ltd., "A container for maintaining a beverage cooled".

The 9th July, 1991

197/Bom/91 Indian Oil Corporation Ltd., "Process for the preparation of methylenebis (2, 6-di-tert-butylphenol)".

198/Bom/91 Indian Oil Corporation Ltd., "Process for the Quantitative recovery of Naphthanic acids".

The 10th July, 1991

199/Bom/91 Dr. Dhani Ram Baruah, "Biological Heart Valve".

200/Bom/91 Dr. Dhani Ram Baruah, "Biological Heart Valve".

201/Bom/91 Dr. Dhani Ram Baruah & Another, "Total implantable mechanical heart".

202/Bom/91 Dr. Dhani Ram Baruah & Another, "Mechanical Heart valve".

203/Bom/91 Dr. Dhani Ram Baruah, "Membrane oxygenator".

204/Bom/91 Dr. Dhani Ram Baruah, "Biological Heart Valve".

205/Bom/91 Devendra Somabhai Naik, "An improved centrifugal pump for a close circuit plant".

206/Bom/91 Devendra Somabhai Naik, "An improved impeller of centrifugal pump and centrifugal pump comprising the same".

## APPLICATION FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 002

The 29th July, 1991

- 569/Maa/91 Merlin Gerin, "Connection process by welding of a flexible conductor to a contact finger, and electrical contact structure with several blades".
- 570/Maa/91 Merlin Gerin, "Electronic Trip Device with short delay function".
- 571/Maa/91 Hoechst Aktiengesellschaft, "Process and apparatus for preparing high-purity 1, 2-Dichloroethane with heat recovery".

The 30th July, 1991

- 572/Maa/91 Lucas Industries Public Limited Company, "Automatic brake adjuster".
- 573/Maa/91 Borden, Inc, "High surface area magnesia as hardener for phenolic resins".
- 574/Maa/91 Borden, Inc, "Accelerators for curing phenolic resole resins".
- 575/Maa/91 Borden Inc, "Retarders for curing/hardening resole resins".
- 576/Maa/91 Aware, Inc, "Improved image coding apparatus and method utilising separable transformations".
- 577/Maa/91 Institut Francais Du Petrole, "A seismic prospection method and a system for the same".

The 31st July, 1991

- 578/Maa/91 Sree Chitra Tirunal Institute for medical Sciences, "A process for the preparation of anti-gal from outdated human plasma".
- 579/Maa/91 CPC International Inc, "High-speed starch-based corrugating adhesive containing a carrier phase comprised of starch, modified starch or dextrin and polyvinyl alcohol".
- 580/Maa/91 Frish Pty, Ltd, "Harvesting vessel" (August 1, 1990; Australia).
- 581/Maa/91 American Telephone and Telegraph Company, "Local area network architecture" (August 21, 1990; Canada).

The 1st August, 1991

- 582/Maa/91 Maschinenfabrik Rieter AG, "Apparatus for guiding a revolving flat of a card".
- 583/Maa/91 Aware, Inc, "Novel spread spectrum coded apparatus and method".

The 2nd August, 1991

- 584/Maa/91 Selvakumar R., "Three in one indicator with disposable fuse card".

- 585/Maa/91 Comalco Aluminium Limited, "Gas-solid contacting method" (August 3, 1990)

- 586/Maa/91 Zellweger Uster AG, "Machine for the automatic drawing-in of warp threads".

- 587/Maa/91 Zellweger Uster AG, "Thread Monitor".

- 588/Maa/91 Zellweger Uster AG, "Device for the handling of drop wires in a warp yarn drawing-in machine".

- 589/Maa/91 Zellweger Uster AG, "Device for drawing warp yarns into a weaving read".

- 590/Maa/91 Maschinenfabrik Rieter AG, "Wadding opener".

## ALTERATION DATED UNDER SECTION 16

169193 : Ante-dated to 16-4-86  
(754/Del/88)

169194 : Ante-dated to 9-3-86  
(981/Del/88)

169195 : Ante-dated to 2-9-86  
(1042/Del/88)

169239 : Ante-dated to 27-2-84  
(924/Del/86)

## OPPOSITION PROCEEDINGS

(1)

The opposition entered by Council of Scientific & Industrial Research to the grant of a Patent on application No. 161394 made by Institut Francais DU Petrole as notified in the Gazette of India, Part III Section 2 dated 11-6-88, has been dismissed and it is ordered that a Patent shall be sealed with some amendments as mentioned in the order.

(2)

The Opposition entered by Shri Ramash Chandra Harilal Pithadiya to the grant of Patent on application No. 161310 made by Shri Suresh Chandra Suri as notified in the Gazette of India Part III Section 2 dated 4-6-88 has been allowed and it is ordered that no Patent shall be granted on the application.

## PATENT SEALED

162715 165024 165399 166911 166918 167034 167074 167076 167127  
167146 167252 167263 167310 167403 167404 167405 167465 167466  
167468 167471 167472 167474 167482 167483 167484 167495 167496  
167497 167568 167604 167614 167632 167638 167661

Cal — 9

Del — 12

Maa — 9

Bom — 4

## AMENDMENT PROCEEDINGS UNDER SECTION 57

(1)

Notice is hereby given that LAMEPLAST DI GIOVANNI FERRARI & CO., s.n.c., a Company organised under the law of the Italian Republic of Via G. Carducci, 28/32 Rovereto di Novi, Modena, Italy; and SCLAVO S.p.A., a Company organized under the laws of the Italian Republic of Via Fiorentina, 1-Siena, Italy, have made an application under Section 57 of the Patents Act, 1970 for amendment of application and specification of their application for Patent No. 168888 for "PLASTIC CONTAINER FOR THE CONTROLLED DELIVERY OF POWDERS AND OF LIQUIDS AS DROPS". The amendments are by way of correction. The application for amendments and the proposed amendments can be inspected free of charge at the Patent Office Branch, 61, Wallajah Road, Madras-600 002, or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a Notice of Opposition on prescribed Form-30 within 3 months from the date of the Notification at the Patent Office, Madras-2. If the written statement of opposition is not filed with the Notice of opposition, it shall be left with one month from the date of filing the said Notice.

(2)

Notice is hereby given that Mr. Hement Madhukar Ranadive, at Hetkari Mahajan Wadi Ranade Road, Dadar, Bombay-400 028, Maharashtra, India, an Indian National has made application under section 57 of the Patents Act, 1970, for amendment of address for service in India in respect of Patent Application No. 168847 (213/Bom/1989) for "An improved unidirectional power transmitting shaft coupling". The application for amendment and proposed amendment can be inspected free of charge at the Patent Office Branch, Todi Estates, IIIrd Floor, Sun Mill Compound, Lower Parel (West), Bombay-400 013, on any working day during the usual office hours or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file the notice of opposition on the prescribed Form-30 alongwith full written statement within three months from the date of this notification of the Patent Office Branch, Bombay.

If full written statement of opposition is not filed with the notice of opposition it should be left within one month from the date of filing the said notice of opposition.

(3)

Proposed amendments under section 57 of the Patents Act, 1970 in respect of Patent Application No. 166562 (905/Mas/85) as advertised in the Gazette of India dated 10-11-1990 have been allowed.

## RENEWAL FEES PAID

150100 150121 150122 153668 154604 155455 156727 159354 160926  
164051 165323 165429 165986 166621 167230

## COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said

period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

## स्वीकृत सम्पूर्ण विनिर्देश

एतद्वारा यह सूचना दी जाती है कि सम्बन्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अग्रिम ऐसी अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र-14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कभी भी नियंत्रक, एकस्थ को ऐसे विरोध की सूचना विहित प्रपत्र-15 पर दे सकते हैं। विरोध सम्बन्धी लिखित वक्तव्य, उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथाविहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिए।

"प्रत्येक विनिर्देश के संदर्भ में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अन्तरराष्ट्रीय वर्गीकरण के अनुरूप हैं।"

नीचे सूचीगत विनिर्देशों की सीमित संख्यक में मुद्रित प्रतियाँ, भारत सरकार बुक डिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय हेतु यथासमय उपलब्ध होगी। प्रत्येक विनिर्देश का मूल्य 2/- रु० है (यदि भारत के बाहर भेजे जाएं तो अतिरिक्त टाक खर्च)। मुद्रित विनिर्देश की आपूर्ति हेतु मांग पत्र के साथ निम्नलिखित सूची में यथाप्रदर्शित विनिर्देशों की संख्या संलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियाँ, यदि कोई हों, के साथ विनिर्देशों की टंकित अथवा फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय, कलकत्ता द्वारा विहित लिप्यान्तरण प्रमार जिसे उक्त कार्यालय से पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरान्त उसकी अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेख कागजों को जोड़कर उसे 4 से गुणा करके; (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रमार 4/- रु० है) फोटो लिप्यान्तरण प्रमार का परिकलन किया जा सकता है।

Ind. Cl.: 6 A.

169171

Int. Cl.: F 01 P 3/00.

**DIESEL ENGINE-DRIVEN SCREW COMPRESSOR IN WHICH IMPROVED COOLING OF INJECTED OIL IS EFFECTED.**

**Applicant & Inventor :** KRISHAN GOPAL KHOSLA, AN INDIAN CITIZEN, OF 11, PRITHVI RAJ ROAD, NEW DELHI, INDIA.

Application for Patent No. 37/Del/87, filed on 20th January, 1987.

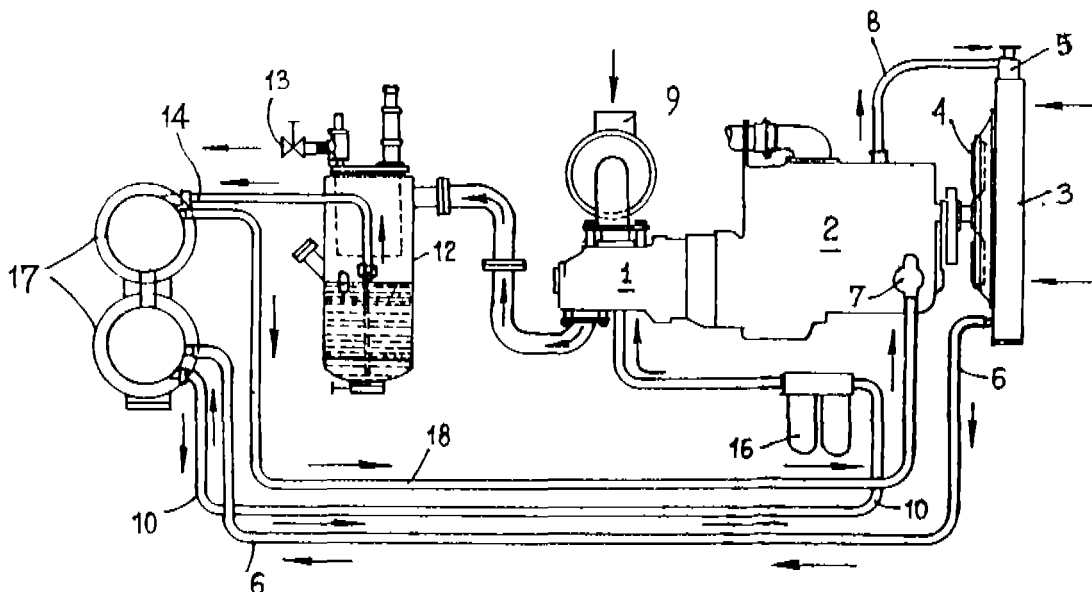
Complete Specification left on 11 Apr 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

**5 Claims**

A diesel engine-driven screw compressor of the oil injection type in which improved cooling of injected oil is effected characterised in

that said screw compressor is connected to and driven by a diesel engine, said engine being provided with a water-filled radiator equipped with a cooling fan for the intake of ambient air for cooling the water flowing through said radiator, a collection-cum-separation chamber (12) is connected to the outlet of said compressor for collecting the compressed air-oil mixture emitting from the compressor and separating the air from the oil, oil cooling means (17) is connected to the oil outlet of said collection-cum-separation chamber whereby the hot oil collected in said chamber is led to said oil cooling means, ducting means (18) connecting the outlet for cooled water of said radiator to said oil cooling means to effect substantially direct and intimate heat exchange between the oil and the cooled water, first recycle means is connected between the oil and the oil outlet from said oil cooling means and said screw compressor for recycling cooled oil for injection once again into said compressor and second recycle means is connected between the water outlet of said oil cooling means and said engine for feeding semi-warmed water through the engine block of said engine (2) to be collected in a reservoir (5) connected to said radiator (3) for onward flow once again through the radiator so as to be cooled before being passed again to said oil cooler means.



Prov. Specn. 5 Pages.

Compl. Specn. 12 Pages.

Drg. 1 Sheet.

Ind. Cl.: 90 I &amp; K.

169172

Int. Cl.: C 03 C 3/078.

**A PROCESS FOR THE MANUFACTURE OF BRONZE COLOURED SHEET GLASS.**

**Applicant :** COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

**Inventors :** KAMESHWAR PRASAD SRIVASTAVA, SAILENDRA KUMAR DAS AND RAVINDRA NATH DWIVEDI.

Application for Patent No. 63/Del/87, filed on 28th January, 1987.

Complete Specification left on 28th April, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

**3 Claims**

A process for the manufacture of bronze coloured sheet glass which comprises preparing a glass by mixing the following ingredients within the range in weight percent of  $\text{SiO}_2$ : 70—75, RO: 6—12 where RO represents CaO or MgO or mixtures thereof,  $\text{Al}_2\text{O}_3$  0.5—1.6,  $\text{R}_2\text{O}$  12—16, where  $\text{R}_2\text{O}$  represents  $\text{Na}_2\text{O}$  or  $\text{K}_2\text{O}$  or mixtures thereof, Se: 0.002—0.05,  $\text{Fe}_2\text{O}_3$ : 0.2—0.3,  $\text{Co}_3\text{O}_4$ : 0.002—0.004, NiO: 0.008—0.3, salt cake: 0.70—2.19 and nitre: 0.70—4.39, melting the resultant mixture in neutral atmosphere by heating at a temperature in the range of 1400—1450°C, homogenising the melt by known methods, casting, rolling/drawing and annealing the resultant product by known methods to get bronze coloured sheet glass.

Provsn. Specn. 5 Pages.

Compl. Specn. 6 Pages.

Drg. Nil.

Ind. Cl.: 68 D.

Int. Cl.<sup>4</sup>: H 02 J 3/18.

169173

Complete Specification left on 5th July, 1988. Post-dated to 9th April, 1987.

**A VOLT AMPERE REACTIVE CONTROLLER FOR ELECTRIC POWER SYSTEM.**

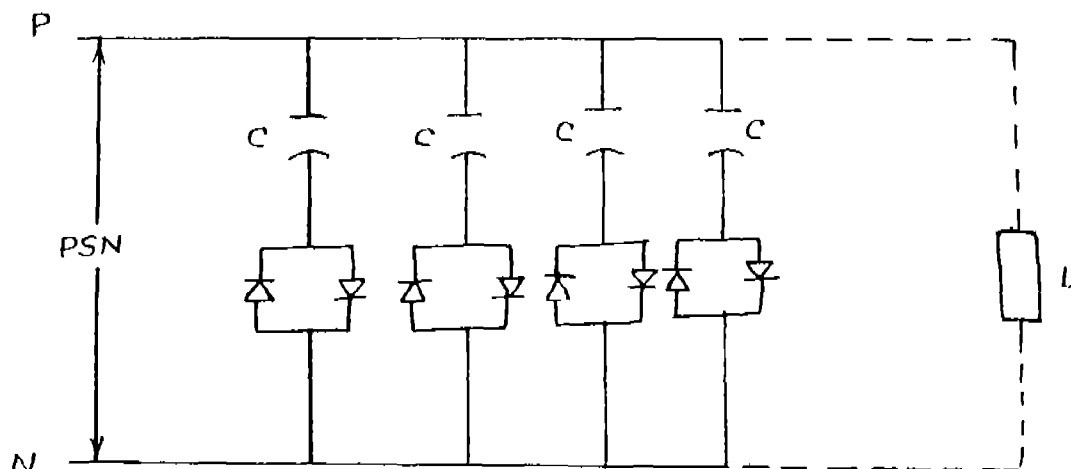
Applicant & Inventor : JAYANTA KUMAR CHATTERJEE, AN INDIAN NATIONAL, DEPARTMENT OF ELECTRICAL ENGINEERING, INDIAN INSTITUTE OF TECHNOLOGY, DELHI, HAUZ KHAS, NEW DELHI-110 016.

Application for Patent No. 207/Del/87, filed on 9th March, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

**4 Claims**

A volt ampere (VAR) reactive controller for electric power systems comprising at least a set of two bridge rectifiers consisting of six thyristors (1P to 6P), (1N to 6N) connected in pairs and in back to back in dual converter mode, each of said pair of thyristors being connected in parallel with a three phase bank of capacitors (c) and across a three phase balanced a.c. power system, an inductor (c) being connected at the d.c. or output end of the said set of bridge rectifiers.



Prov. Specn. 4 Pages.

Compl. Specn. 24 Pages.

Drgs. 5 Sheets.

Ind. Cl.: 32E.

Int. Cl.<sup>4</sup>: C 08 F 14/06.

169174

**A PROCESS FOR THE MICRO-SUSPENSION POLYMERIZATION OF VINYL HALIDES.**

Applicant : SHRI RAM INSTITUTE FOR INDUSTRIAL RESEARCH, 19, UNIVERSITY ROAD, DELHI-110007, INDIA, AN INDIAN INSTITUTE REGISTERED UNDER THE SOCIETIES REGISTRATION ACT.

Inventors : HUKUM CHAND JAIN, VED PRAKASH MALHOTRA, JOHN GEORGE, JAGDISH KUMAR GULATI, RAJENDRA KUMAR DIWAN & NEERAJ KUMAR GUPTA.

Application for the Patent No. 746/Del/87, filed on 25th August, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

**7 Claims**

A process for the micro-suspension polymerization of vinyl halides such as vinyl chlorides which comprises in preparing a homogenous reaction medium consisting of ionized water, an azo or peroxy catalyst such as 2-2' (azobis) 2, 4 dimethyl valero nitrile, isopropyl peroxy dicarbonate, di-2-(ethyl hexyl) dicarbonate or di-cetyl

peroxy dicarbonate, an emulsifier, a dispersing agent consisting of hydrolized polyvinyl acetate, known antifoaming and buffer agents, subjecting such a reaction medium in a closed vessel to the step of micro-suspension polymerization in the presence of the vinyl halide by heating said medium and said vinyl halide monomer to a temperature of 40 to 70°C till 85 to 90% polymer achieved.

Compl. Specn. 12 Pages.

Drg. NIL.

Ind. Cl.: 32 F(a).

Int. Cl.<sup>4</sup>: C 07 D 307/08.

169175

**A PROCESS FOR THE PREPARATION OF TETRA-HYDROFURAN DERIVATIVES.**

Applicant : SOCIETE DE CONSEILS DE RECHERCHES ET D'APPLICATIONS SCIENTIFIQUES (S.C.R.A.S.), A FRENCH COMPANY, OF 51/53 RUE DU DR. BLANCHE, 75016 PARIS, FRANCE.

Inventors : JEAN-JACQUES GODFROID, FRANCOISE HEYMANS & PIERRE BRAQUET.

Application for Patent No. 7/Del/88, filed on 5th January, 1988.

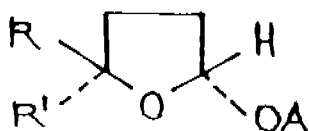
Convention date January 27, 1987/8701727/(U.K.)



Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 2 Claims

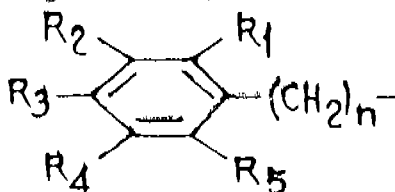
A process for the preparation of tetrahydrofuran derivatives of the formula I



Formula I

wherein

either each of R and R' independently represents a hydrogen atom, a straight chain or branched chain alkyl, alkenyl or alkynyl group having from 4 to 22 carbon atoms, a cycloalkyl or cycloalkenyl group having from 5 to 10 carbon atoms, a heterocyclic ring having 5 or 6 ring atoms of which one is a nitrogen, oxygen or sulphur atom, or a group of the general formula IV

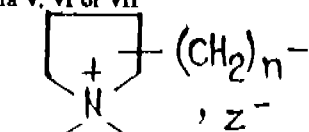


Formula IV

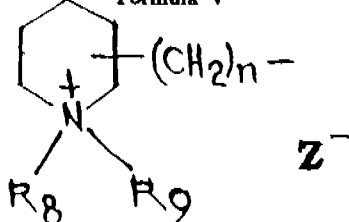
wherein

n is zero or an integer of item 1 to 5 either each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub> and R<sub>5</sub> independently represents a hydrogen, chlorine, bromine or iodine atom, a nitro, trifluoromethyl, trifluoromethoxy or trifluoromethylthio group or R and R' together form a cycloalkyl group having from 5 to 10 carbon atoms and wherein A represents:

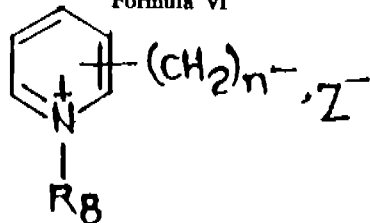
—a pyrrolidinium-alkyl or piperidinium-alkyl or pyridinium-alkyl salt of the formula V, VI or VII



Formula V

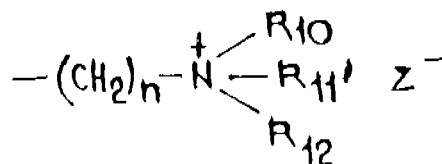


Formula VI

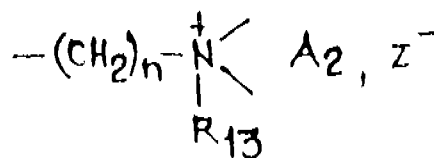


Formula VII

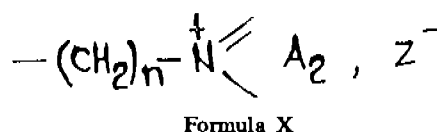
in which the alkyl group—(CH<sub>2</sub>)<sub>n</sub>—is of straight chain or branched chain configuration and has from 0 to 10 carbon atoms with each of R<sub>1</sub> and R<sub>2</sub> independently representing a hydrogen atom, a straight chain or branched chain alkyl or alkenyl group having up to 10 carbon atoms, a phenyl group or a phenylalkyl group, in which the alkyl group has from 1 to 5 carbon atoms,—an ammonium salt of formula VIII, IX or X



Formula VIII

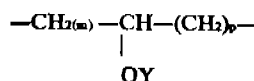


Formula IX



Formula X

wherein (CH<sub>2</sub>)<sub>n</sub> may be the substituted chain

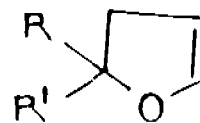


wherein Y stands for alkyl or benzyl and m and p are such as both m and p > 1 with m + p + 1 = n, said n being an integer of from 2 to 11, Z represents a pharmaceutically acceptable anion, each of R<sub>10</sub>, R<sub>11</sub>, R<sub>12</sub> and R<sub>13</sub> independently represents a CH<sub>3</sub> or C<sub>2</sub>H<sub>5</sub> and the ring NA<sub>2</sub> is either an optionally substituted monocyclic ring containing 5 to 8 ring atoms of which one is nitrogen atom shown, another is a nitrogen or sulfur or oxygen atom, and the remainder are carbon atoms, or

—is such as —O— A is a dehydro residue of an amino acid or of a short peptide, or

—an alkyl —A is a dehydro residue of an amino acid or of a short peptide, or

an alkyl —A<sub>1</sub> group in which the alkyl group is of straight chain or branched chain configuration and has from 2 to 11 carbon atoms and A<sub>1</sub> represents an amino acid linked to the chain through an ester or an amide function or a small peptide (2 or 3 amino acids) or a glutathion which comprises reacting in an aprotic solvent, at room temperature and in the presence of p-toluenesulphonic acid, a compound of formula II



Formula II

wherein R and R' are as above defined with an excess of up to 10% of a compound of the general formula HOB wherein B is the precursor

of A containing an amino group or a halo atom and converting in a conventional manner as herein before defined, the product so obtained to said compound of formula I.

Compl. Specn. 22 Pages.

Drgs. 8 Sheets.

Ind. Cl.: 10-B—[GROUP-XXXIX (2)].  
Int. Cl.: C 06 C 7/02.

169176

### AN IMPROVED DETONATOR WITH A PRIMER ELEMENT.

Applicant: DYNAMIT NOBEL AKTIENGESellschaft, OF POSTFACH 1261, 521 TROISDORF, GERMANY, A COMPANY ORGANIZED UNDER THE REPUBLIC OF GERMANY.

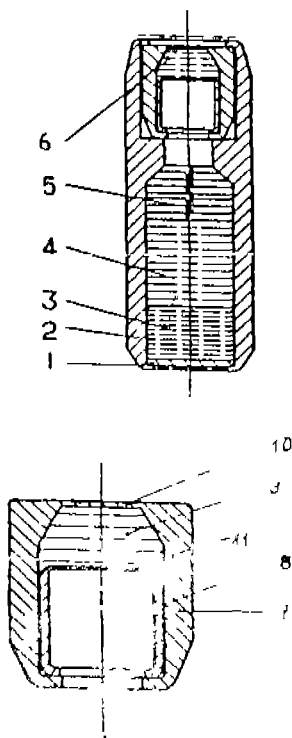
Inventors: (1) REGINA PRASNIK (2) DR. GOTTFRIED PRASNIK (3) PETER-JOSEF GROMMES (4) GUNTER KULHACH.

Application No. 44/Mas/87, filed on January 22, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Madras Branch.

#### 9 Claims

An improved detonator with a primer element, mechanically triggerable by a firing pin capable of puncturing the said element (6) and initiating a delay charge (5) consisting of an initiating charge (4) and secondary charge (3) arranged in a common detonator casing (2) characterized in that the said primer element has at least one outer casing (7) and at least one inner casing (8) coaxially positioned within the outer casing along sidewalls of the casings and arranged so as to have a cavity between a bottom wall (10) of the outer casing (7) and a bottom wall (11) of the inner casing (8), sidewalls of said cavity being defined by at least one sidewall of the outer casing (7) and said cavity capable of being filled with a known quickly reacting initiating explosive.



Compl. Specn. 9 Pages

Drg. 1 Sheet.

Ind. Cl.: 40 F [GROUP-XXXIX (1)]  
Int. Cl.: C 01 F 1/02 B 01 B 5/66

169177

### APPARATUS FOR SLUICING THE GRAINS IN ALUMINA HYDRATE SLURRY.

Applicant: MAGYAR ALUMINIUM-ÉRTÉSZET, Or POZSONYI UT 56, BUDAPEST XI, HUNGARY. A HUNGARIAN COMPANY.

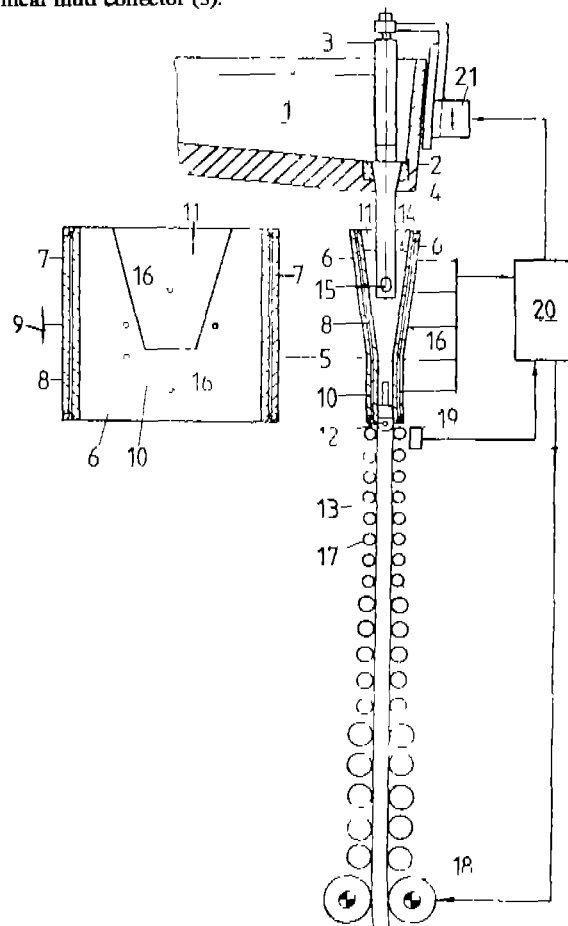
Inventors: (1) GYULA ODOR, (2) ERIGYIS SAPO, (3) BELA SZABO, (4) LAJOS SZUCS, (5) MIHAIY LAFION, (6) JANOS STEINLE, (7) LASZLO RFV, (8) FERENC TOTTL, (9) FERENC WEISZENGROBER.

Application No. 53/Mas/87, filed on 27th January 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

#### 4 Claims

Apparatus for sluicing of grains in hydrate slurry consisting of a cylindrical container having a conical mud collector, a feeding system, a slurry outlet stub and an overflow characterized in that the inlet stubs (5) of the feeding system are placed off-centre to the geometrical axis of the container. Each inlet stub is connected to a presizer equipment (6) consisting of a bundle of pipes and/or pack of plates having a slope of 30 to 80° to the geometrical centre of the container, the upper part of the presizer equipment (6) has openings (11) for outlet of foam, the lower part of the said presizer equipment (6) is connected to a concentric cone-frustum type deflector casing (7), below the deflector casing (7) is a concentric, vertically adjustable convex control cone (8), a central liquid inlet (14) is placed in the conical mud collector (3).



Compl. Specn. 16 Pages

Drg. 1 Sheet.

Ind. Cl. : 32 E [GROUP IX (1)].  
Int. Cl.<sup>4</sup> : C 08 L 69/00.

169178

**A PROCESS FOR THE PREPARATION OF A (CO) POLYMERIZABLE COMPOSITION CONTAINING A DIOL BIS (ALLYL CARBONATE) MONOMER AND AN AROMATIC DIACYL PEROXIDE.**

**Applicant :** AKZO N.V., A COMPANY ORGANIZED AND EXISTING UNDER THE LAWS OF THE KINGDOM OF THE NETHERLANDS, OF VELPERWEG 76, 6824 BM ARNHEM, THE NETHERLANDS.

**Inventor :** JOHANNES BRAND.

**Application No.** 50/Mas/87, filed on 27th January, 1987.

**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.**

#### 7 Claims

A process for preparing a co-polymerizable composition containing a diol bis (allyl carbonate) monomer and an aromatic diacyl peroxide comprising dissolving in diol bis (allyl carbonate) monomer 0.6 to 10.8 weight percent of a peroxide composition obtained by admixing the aromatic diacyl peroxide with 20 to 80% by weight based on the weight of the peroxide composition of an organic desensitizing agent selected from an ester of one of the three isomeric benzene dicarboxylic acids having a melting or softening point higher than 40°C.

**Compl. Specn.** 13 Pages.

**Drg.** 1 Sheet.

Ind. Cl. : 170-B [GROUP XLIII (4)].  
Int. Cl.<sup>4</sup> : C 11 D 3/08; 3/17

169179

**A PROCESS FOR THE PRODUCTION OF PHOSPHATE-FREE DETERGENT BAR AND A DETERGENT BAR PREPARED THEREBY.**

**Applicant :** HENKEL KOMMANDITGESELLSCHAFT AUF AKTIEN, A COMPANY ORGANIZED AND EXISTING UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY, OF HENKELSTRASSE 67, DUSSELDORF FEDERAL REPUBLIC OF GERMANY.

**Inventors :** (1) DR. KLAUS KOSTER, (2) SEAMUS FRENCH, (3) DR. FRANZ JOSEF CARDUCK, (4) ULRICH JOHNKE, (5) KARL SCHWADTKE, (6) EDUARD SMULDERS, (7) PETER KRINGS.

**Application No.** 54/Mas/87, filed on 28th Jan. 1987.

**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.**

#### 9 Claims

A phosphate free detergent bar consisting of known synthetic anionic surfactants, known water-insoluble known builders and fillers containing from 0.5 to 10% by weight of an alkali silicate and from 0.5 to 10% by weight of a polyethylene glycol having an average molecular weight of from 1,000 to 45,000.

**Compl. Specn.** 11 Pages.

**Drg.** NIL.

Ind. Cl. : 40 F [GROUP IV (1)].  
Int. Cl.<sup>4</sup> : B 01 J 8/00.

169180

**APPARATUS FOR CARRYING OUT MIXING OR CHEMICAL REACTIONS IN THE LIQUID STATE.**

**Applicant :** HENKEL CORPORATION, A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A., OF 7900 W. 78TH STREET, MINNEAPOLIS, MINNESOTA 55435, UNITED STATES OF AMERICA.

**Inventor :** BRUCE BEREITER.

**Application No.** 56/Mas/87, filed on 29th January, 1987.

**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.**

#### 12 Claims

**Apparatus for carrying out mixing or chemical reactions in the liquid state comprising :**

- (a) a reactor or mixing vessel having a cone-shaped bottom section;
- (b) a conduit extending through the vessel, and equipped with a first and a second set of openings in the wall thereof, the first set of openings positioned near the bottom of the vessel, and the second set of openings positioned above the first set and having means therebetween to direct the flow of liquid contents existing the conduit through the second set of openings toward the side walls of the vessel;
- (c) a recirculating system having means for recirculating the liquid contents of the conduit existing the vessel back into the vessel.
- (d) supply means for introducing liquid materials into the conduit; and
- (e) means for diverting the liquid contents of the recirculating system of the system for use for storage.

**Compl. Specn.** 15 Pages.

**Drgs.** 3 Sheets.

Ind. Cl. : 33-A [GROUP XXXIII (3)].  
Int. Cl.<sup>4</sup> : B 22 D 11/16.

169181

**A PROCESS AND APPARATUS FOR THE CONTINUOUS CASTING OF METAL STRIP.**

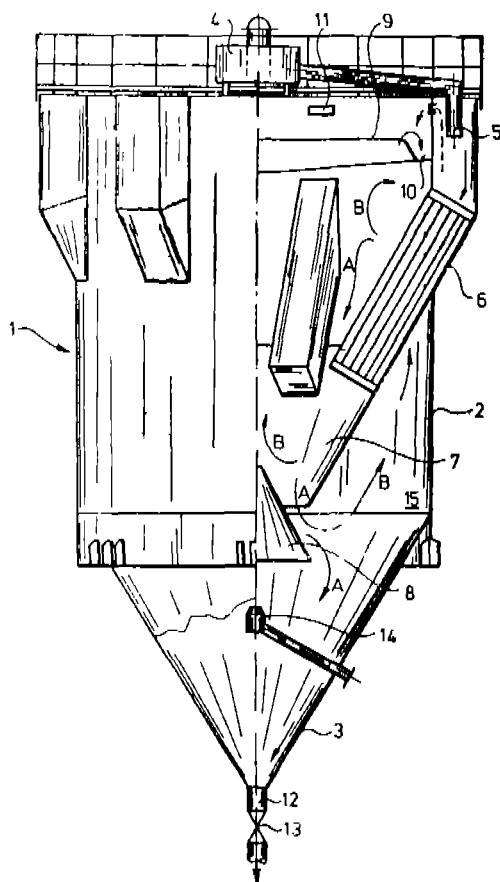
**Applicant :** SMS SCHLOEMANN-SIEMAG AKTIENGESELLSCHAFT, OF EDUARD-SCHLOEMANN-STRASSE, 4000 DUSSELDORF 1, FEDERAL REPUBLIC OF GERMANY, A GERMAN COMPANY.

**Inventors :** (1) GUNTHER FLEMMING, (2) MANFRED KOLAKOWSKI.

**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.**

## 12 Claims

A process for the casting of metal strip continuously comprising the steps of pouring liquid metal into a mold having a flared inlet pouring zone necking down to a distal zone in which the walls of the mold are parallel and spaced apart by substantially the desired cross-sectional shape and dimensions of the strip being cast; controlling the pouring rate thereof, continuously detecting and monitoring the instantaneous surface level of the metal bath in the said mold, withdrawing the casting from the distal end of said mold, and controlling the rate of withdrawal, adjusting the pouring rate and withdrawal rate so that the level of the metal bath is at a maximum height for said mold when in normal operation, continuously sensing the presence of the liquid core of said casting downstream of said mold, reducing the pouring and withdrawal rates for concluding the melt to a rate at which the liquid core of the casting is near to but downstream of the mold and at which the metal bath level drops from said maximum and approaches the level of the orifice of said pouring tube, terminating said pouring before the metal bath level descends to said orifice while continuing said withdrawal, whereby the metal bath level descends rapidly towards the neck end of said flared zone, reducing the withdrawal rate when the metal bath level is close to the lower end of the flared zone to a rate at which the upper surface of the metal bath congeals sufficiently for further processing downstream by the time it reaches the end of the distal zone, and thereafter withdrawing the casting.



Compl. Specn. 19 Pages.

Drgs. 3 Sheets.

Ind. Cl. : 56 A [GROUP V].

169182

Int. Cl.<sup>4</sup> : B 01 D 3/34.

### AN IMPROVED PROCESS FOR DISTILLATIVE PURIFICATION OF ORGANIC COMPOUNDS SELECTED FROM METHYL TERT-BUTYL ETHER, SEC-BUTYL ALCOHOL AND METHYL ETHYL KETONE.

Applicant : RWE-DEA AKTIENGESELLSCHAFT FÜR MINERALÖL UND CHEMIE FORMERLY KNOWN AS DEUTSCHE TEXACO AG, A GERMAN COMPANY, OF UBERSEERING 40, 2000 HAMBURG 60, GERMANY.

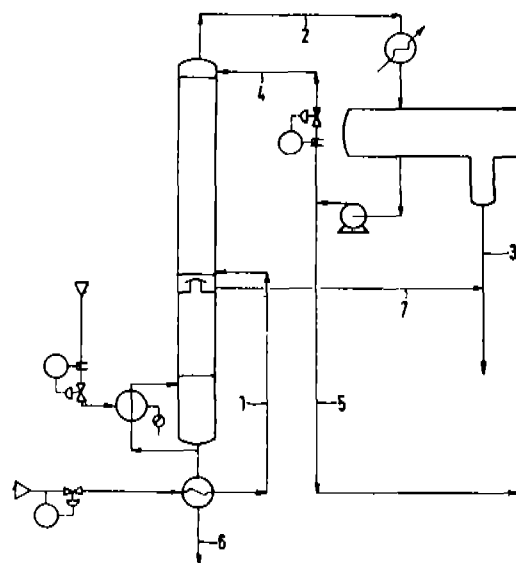
Inventors : (1) GUNTHER OSTERBURG, (2) MILAN PREZELJ.

Application No. 133/Maa/87, filed on 26th February, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

## 2 Claims

In a process for distillative purification of organic compounds selected from methyl tert-butyl ether, sec-butyl alcohol and methyl ethyl ketone, containing water the improvement comprising in continuously separating water contained in the said organic compounds by adding one or more organic compounds capable of preventing or limiting entrainment of water in the overhead product such as n-hexane, distilling the above mixture in a fractionating column, removing the separated water below the level at which said feed is introduced into the column and recovering the substantially water free product from top and bottom of column.



Compl. Specn. 18 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 143 D4 [GROUP XL (5)].

169183

Int. Cl.<sup>4</sup> : B 65 B 57/00.

### AN APPARATUS FOR MONITORING THE TIGHTNESS OF PACKS DISPOSED IN A SYSTEM.

Applicant : SOCIETE DES PRODUITS NESTLE S.A., CASE POSTALE 353, 1800 VEVEY, SWITZERLAND, A COMPANY INCORPORATED IN SWITZERLAND.

Inventors : (1) MEINRAD ROSSE, (2) MARC-HENRI ROSSIER.

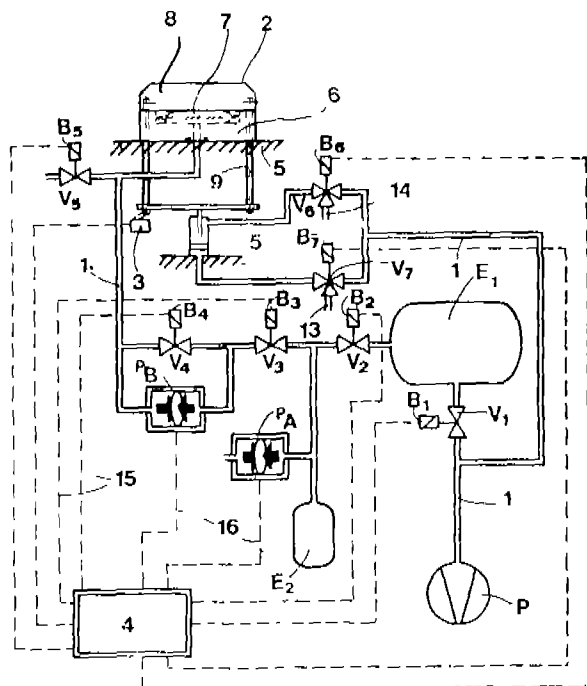
Application No. 138/Mas/87, filed on 27th February, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras

#### 4 Claims

An apparatus for monitoring the tightness of packs disposed in a system characterized in that it comprises the following components connected in line by conduits :

- a means for adjusting the pressure,
- an electrovalve V1 acting as actuator to regulate the pressure p1,
- a measuring chamber designed to receive the pack, said chamber comprising a cover by which it can be opened and closed,
- a reservoir of volume X1 independent of that of the measuring chamber,
- a relative pressure cell pA,
- an electrovalve V3 for separating the section comprising the reservoir from the section comprising the measuring chamber,
- an electrovalve V4 at the ends of which a differential pressure is measured by,
- a differential pressure cell pB.



Compl. Specn. 22 Pages.

Drgs. 3 Sheets.

Ind. Cl. : 65 B1 [GROUP LVII (2)].  
Int. Cl. : H 01 F 27/10.

169184

#### STATIONARY INDUCTIVE APPARATUS.

Applicant : TECHCUT LIMITED, A BRITISH COMPANY, OF 24 RAY STREET, LONDON EC1R 3DJ, ENGLAND.

Inventor : HAROLD LLOYD.

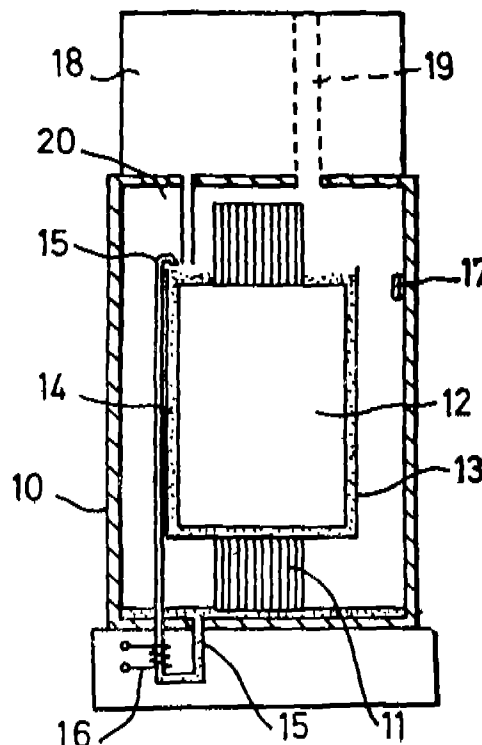
Application No. 169/Mas/87, filed on 11th March, 1987.

Convention date 12-3-1986 No. 8606027 (Great Britain).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

#### 7 Claims

Stationary inductive apparatus comprising a core surrounded by electrical windings and contained within a tank, characterised in that the windings are provided with a container having at least a partially open top portion to contain dielectric and coolant fluid, at least one fluid lift pump to raise liquid from the bottom of the tank to the container; the tank being connected to an external condenser located at a level above that of the windings for the coolant liquid vapour to pass from the tank to the said condenser and return (by gravity) to the said container surrounding the winding.



Compl. Specn. 16 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 172-C [GROUP XX].  
Int. Cl. : D 01 G 15/78.

169185

DEVICE FOR CLEANING THE FLATS IN A REVOLVING FLATS CARD.

Applicant: MASCHINENFABRIK RIETER AG, A BODY CORPORATE ORGANISED UNDER THE LAWS OF SWITZERLAND, OF WINTERTHUR, SWITZERLAND

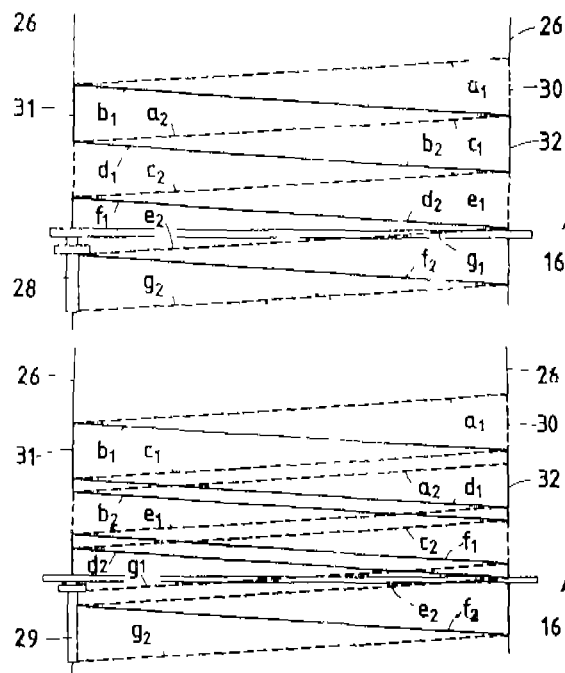
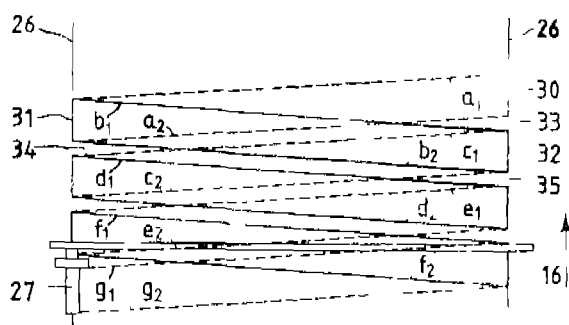
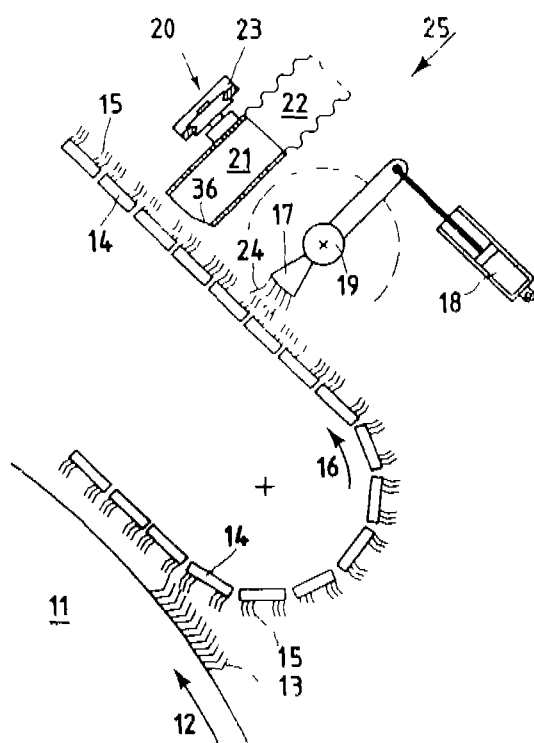
Inventor: GIUSEPPE VERZILI

Application No. 212/Mas/87, filed on 24th March, 1987

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Mumbai

### 6 Claims

Device for cleaning the flats in a revolving flats card for processing of short staple fibre material, for example cotton, with a pivotable brush extending over the complete length of the flat for strip-wise catching of the waste material in the flats and with a suction device serving for carrying away the flats strips, which device is located behind the brush considered with reference to the direction of movement of the flats, characterised in that the suction device (20) comprises a suction nozzle (21, 27, 28, 29) which is reciprocable over the breadth of the set of flats along a rail (23) extending transverse to the direction of movement of the flats (14) and the nozzle opening has an inclination (36) extending upwardly at an angle.



Compl. Specn. 11 Pages.

Drgs 3 Sheets

Ind. Cl : 136 F

169186

Int. Cl<sup>4</sup> : B 29 C 45/00, 45/17 & 45/26

MOULD FOR AN INJECTION MOULDING MACHINE FOR THE INJECTION MOULDING OF OBJECTS MADE FROM THERMOPLASTIC MATERIAL

Applicant: AB CERBO, A SWEDISH JOINT-STOCK COMPANY, OF BOX 905, S-461 29 TROLLHATTAN, SWEDEN

Inventor: RUDOLF GLADYS

Application for Patent No. 17/Del/87, filed on 7th January, 1987.

Convention date: 23 January, 1986/8601600 & 8601601/G.B

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

### 8 Claims

Mould for an injection moulding machine for the injection, moulding of objects made from thermoplastic material, said mould comprising first (1, 11) and second (2, 12) mould halves to form at least one cavity therebetween on said first mould half said mould halves being mounted in said moulding machine and relatively movable towards each other, a sprue bush (3, 17) provided for each said at least one cavity for injecting the moulding composition therein, a blank (4, 13) located between the two open halves of the mould and disposed on said first mould half (1, 11), said blank (4, 13) being of the kind having a hole (5, 14) through which, when the two mould halves are closed, the thermoplastic material is injected via said sprue bush (3, 17) and means located on the first mould half for keeping the blank in position when the two mould halves are closed, characterised in that the sprue bush has a neck portion (7) which projects through the said hole in the blank when the two mould halves are closed, to keep the blank in its proper position by engagement between the said neck portion and the said hole.

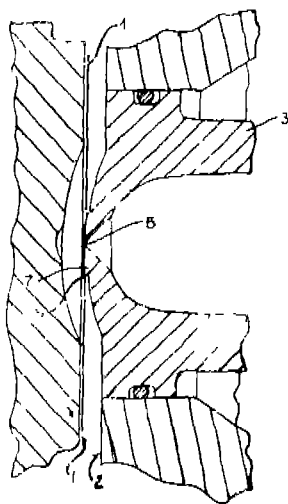


Fig. 1

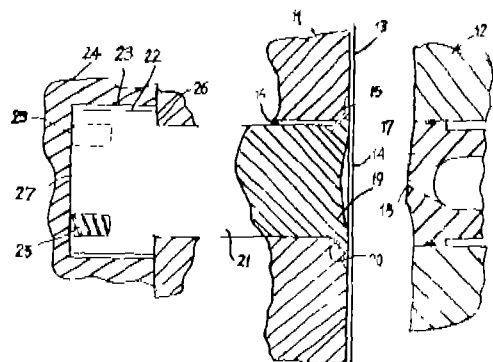


Fig. 2

Compl. Specn. 12 Pages.

Drgs 2 sheets.

Ind. Cl.: 32 B.  
Int. Cl.4: C10G 31/00

169187

# A PROCESS FOR THE STEAM CRACKING OF HYDROCARBONS.

Applicant: THE M W KELLOGG COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF THREE GREENWAY PLAZA, HOUSTON, TEXAS 77046-0395, UNITED STATES OF AMERICA.

Inventors: LARRY GENE HACKEMESSER & BRADLEY LYNN LANKFORD.

Application for Patent No. 240/Del/87, filed on 19th March, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

10 Claims

A process for the steam cracking of hydrocarbons which comprises:

- preheating an initial hydrocarbon feed in a convection zone of a cracking furnace;
- mixing diluent steam with the resulting preheated, initial hydrocarbon feed to form a mixed feed;
- cooling the mixed feed;
- reheating the cooled mixed feed in said convection zone to incipient cracking temperature, and
- cracking the reheated mixed feed containing all the initial hydrocarbon feed in a radiant zone of said cracking furnace.

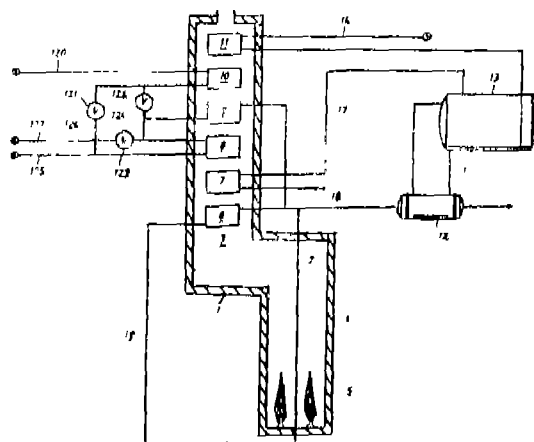


Fig. 1

Compl. Specn. 12 Pages.

Drgs 1 Sheet.

Ind. Cl.: 14 C.  
Int. Cl.4: H01M 2/00.

169188

## MULTI-CELL BATTERY

Applicant: ALCAN INTERNATIONAL LIMITED, A COMPANY INCORPORATED UNDER THE LAWS OF CANADA, OF 1188 SHERBROOKE STREET, WEST MONTREAL, QUEBEC, CANADA H3A 3G2.

Inventors: DAVID S. STRONG & JOHN A. DAWSON.

Application for Patent No. 890/Del/87, filed on 12th October, 1987.

Convention date 22 October, 1986/521112/CANADA.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005

19 Claims

A multi-cell battery comprising:

- a tank (10) providing a single continuous reservoir for liquid electrolyte;
- a plurality of air cathode assemblies (15), each assembly (15) comprising a pair of air cathodes (16) supported in an electrically non-conductive frame (17) in electrically isolated relation to each other and providing between

first surfaces thereof a liquid-tight air chamber (20) open to ambient atmosphere, and said assemblies (15) being removably inserted in the reservoir (10) to expose second cathode surfaces remote from the air chamber to electrolyte therein;

- (c) a plurality of metal anodes (35), one (35) for each cathode (16), disposed for immersion in electrolyte in the reservoir (10) in spaced juxtaposed relation to the cathode second surfaces to constitute therewith a plurality of anode (35)-cathode (16) pairs each electrically coupled by electrolyte.
- (d) conductors (67) connecting said anode (35)-cathode (16) pairs in series to each other and to an external load; and
- (e) engaging means (18, 25) on the cathode assembly frames (17) connecting the cathode assembly frames (17) with the tank (10) walls (11, 12), when the frames (17) are inserted in the reservoir to divide the reservoir into a plurality of separate and substantially electrically isolated electrolyte-holding zones each containing one anode (35) and the cathode (16) second surface juxtaposed thereto, so as to inhibit anode-to-anode current flow through the electrolyte, and each electrolyte-holding zone having a refuse collecting zone located below the bottoms of the anode (35) and cathode (16).

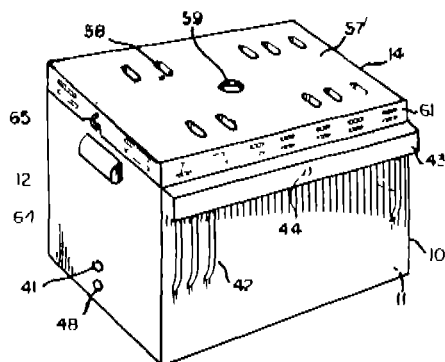


Fig. 1

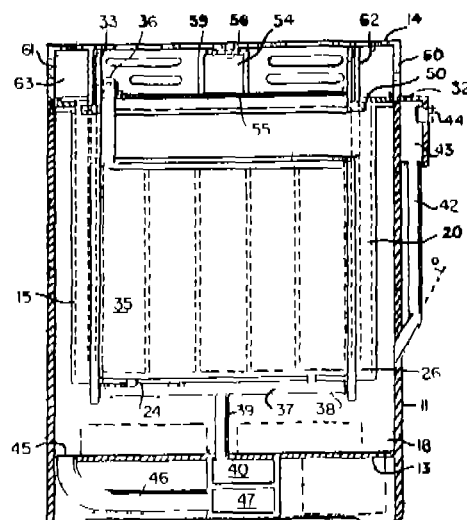


Fig. 2

Compl. Specn. 19 Pages.

Drgs. 9 Sheets.

Ind. Cl.: 40 F.

169189

Int. Cl.: B 01 D 13/04 C 02F 1/44.

A PROCESS FOR THE PREPARATION OF HIGH FLUX MEMBRANE FROM THE BLEND FORMULATIONS OF CELLULOSE ACETATE AND CELLULOSE TRIACETATE USEFUL FOR DESALINATION OF BRACKISH WATER BY REVERSE OSMOSIS PROCESS.

Applicant: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860)

Inventors: SHARDA VITTHALDAS JGSHI, AYYAMA-SOMAYAJULA VISWESWARA RAO & MIRZA MOHAMMED TAQUI KHAN.

Application for the Patent No. 1082/Del/87, filed on 16th December, 1987. Complete Specification left on 14th March, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005

## 7 Claims

A process for the preparation of high flux membrane from the blend of formulation of cellulose acetate and cellulose triacetate useful for the desalination of brackish water by reverse osmosis process which comprises dissolving 3 to 8 gms of cellulose triacetate in a solvent comprising dioxane and acetone, in the ratio ranging from 2.5 : 1 adding 16-22 gms of cellulose acetate to the said solution followed by adding methanol in the concentration of 5-9 ml and maleic acid, in the concentration of 3-6 gms to provide a casting solution of about 40,000 to 90,000 CPS viscosity, filtering the solution to remove suspended impurities casting the solution on a smooth polymeric sheet in 3 steps by method as herein described to produce high flux membrane.

Provl. Specn. 3 Pages.  
Compl. Specn. 18 Pages.

Drg. 1 Sheet.

Ind. Cl.: 13 A.

169190

Int. Cl.: B 65 D 30/00.

## A FLEXIBLE GARMENT BAG.

Applicant: SAMSONITE CORPORATION, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A., OF 11200 EAST 45TH AVENUE, DENVER, COLORADO 80239, U.S.A.

Inventor: WILLIAM LEWIS KING.

Application for Patent No. 1093/Del/87 filed on 17th December, 1987.

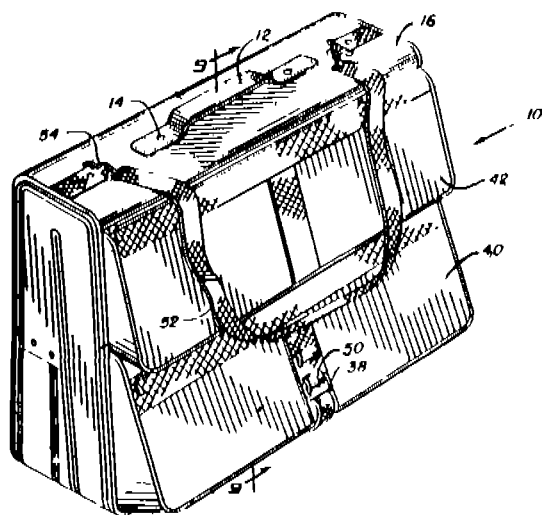
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

## 10 Claims

A flexible garment bag (10) having an enclosed interior space for receiving garments comprising a front panel and a back panel (36); relatively narrow top (32), bottom (22) and side panels (24) connecting said front and back panels in spaced relationship, said front,



back, top, bottom and side panels thus defining, at least in part, said enclosed interior space; an access panel (18) for providing entry into said space, said access panel (18), when closed, constituting at least a major portion of said front panel and defining a portion of said interior space, said enclosed interior space being composed of an upper portion and a lower portion, hanger support means (76) being centrally located in said upper portion for receiving clothes hangers (74) and diagonal pockets (28) being provided in the upper corners of said enclosed interior space for receiving accessories and the like, in order substantially to avoid wrinkling of garments packed within said interior space, a handle (12) or like means for carrying is attached to the outer surface of said access panel (18) whereby said panel becomes the exterior side when the bag (10) is folded upon itself to be carried like a suitcase, the interior of said bag being provided with a pair of straps (78), each strap being connected to said bag (10) and extending diagonally for engagement at a respective upper diagonal pocket (28) so that said straps (78) criss-cross garments hanging on clothes hangers (74) suspended from said hanger support means (76) thereby to assist in holding said garments in place, said access panel being attached to the front edge of the bottom panel and its vertical edges detachably connected to the side panels by means of fasteners.



Compl. Specn. 17 Pages.

Drgs. 3 Sheets.

Ind. Cl. : 40 B.

169191

Int. Cl.<sup>4</sup> : B 01 J-23/42, 37/04.

**A PROCESS FOR THE PREPARATION OF CLAY LOADED METAL COMPLEXES CATALYST USEFUL FOR THE HYDROGENATION OF OILS AND OTHER UNSATURATED COMPOUNDS.**

**Applicant :** COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

**Inventors :** MIRZA MOHAMMED TAQUI KHAN & MHAMED RAFIQ HUSSAIN SIDDIQUI.

Application for Patent No. 1093/Del/85, filed on 20th December, 1985. Complete Specification left on 18th March, 1987.

3—G—237 GI/91

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

5 Claims

A process for the preparation of clay loaded metal complex hydrogenation catalyst which comprises refluxing a platinum group metal complex of the formula  $MX_n$  wherein M is a Platinum group metal, X is hydrogen and 1, 2, 3 or 4 with a donor substituted phosphine or arsine ligand and clay in the presence of an organic solvent, precipitating the solution with ether, filtering and washing the precipitate with organic solvent, drying under vacuum and if required, reprecipitating for purification.

Provl. Specn. 3 Pages.

Drg. Nil.

Compl. Specn. 8 Pages.

Ind. Cl. : 45 G1.

169192

Int. Cl.<sup>4</sup> : E 03 D 1/08.

**AN OUTLET DISCHARGE PIPE FOR SYPHONIC SYSTEM AND A FLUSHING WATER COSET AND URINAL INCORPORATING THE SAID OUTLET DISCHARGE PIPE.**

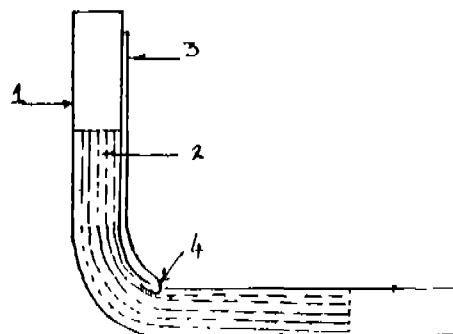
**Applicant & Inventor :** KAILASH NARAYAN VAKIL, CIVIL LINES, BILNORE (U.P.). INDIAN NATIONAL.

Application for Patent No. 1/Del/88, filed on 4th January, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

5 Claims

An outlet discharge pipe for a syphonic system, comprising, a main pipe provided with a plurality of smaller bore tube pipes inside it, one or more of said smaller bore tube pipes having a hole nearer to the outlet end and opening to the atmosphere of the said main pipe than to the inlet-end, a vent pipe being fixed to the said hole provided outside along the outer length of the said main pipe, so as to leave its upper-end open to the atmosphere and connect the lower-end to one or two of said smaller tube pipes at about the middle inside the said main pipe.



Compl. Specn. 6 Pages.

Drg. 1 Sheet.

Ind. Cl.: 129 G P

169193

Int. Cl.: B 23 B 3/00 &amp; 11/00.

**TOOLHEAD FOR USE IN A TURNING MACHINE.**

Applicant: THE CROSS COMPANY, OF 17801 FOURTEEN MILE ROAD, FRASER, MICHIGAN 48026, UNITED STATES OF AMERICA, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF MICHIGAN, U.S.A.

Inventor: RONALD EDWARD CAMPTON.

Application for Patent No 754/Del/88, filed on 5th September, 1988.

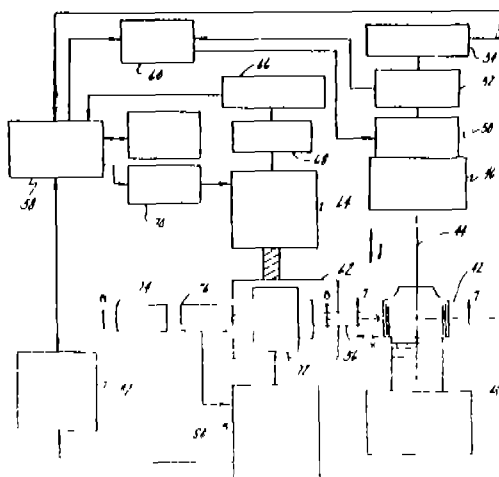
Divisional to Application No. 342/Del/86 filed on 16th April, 1986

Ante-dated to 16th Apr., 1986

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005

**3 Claims**

A tool head (82) for use in a turning machine (40) wherein the position of a tool (56) is controlled relative to the radial dimension of a rotational workpiece (42), said tool (82) head comprising a stationary member (84), a linear (72) motor mounted on said stationary (84) member and having an axis (97) along which it acts, and a tool (128) carriage mounted on said stationary (84) member, characterised in that said tool carriage (128) is a hollow bar connected at one end to said linear (72) motor for transmitting linear motion, the other end of said carriage (128) being connectable to the tool (56), said carriage having an axis (9) coincident with said axis (97) of said linear (72) motor and being mounted on said stationary (84) member by means of a set of bearing (138, 178) means disposed in co-operative relation with said moveable (84) member and said carriage (128) for enabling said carriage (128) to have a reciprocate sliding movement on the stationary (84) member for controlled positioning relative to the radial dimension of the workpiece (42).



Contd.

Drgs. 2 Sheets.

Ind. Cl. 40 F

169194

Int. Cl. G 3

**APPARATUS FOR HOLDING A SENSING PROBE.**

Applicant: KENNECOTT MINING CORPORATION, FORMERLY KNOWN AS KENNECOTT CORPORATION, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA, HAVING A PLACE OF BUSINESS AT THE STANDARD OIL COMPANY HEADQUARTERS BUILDING, 200 PUBLIC SQUARE, CLEVELAND, OHIO 44114-2375, UNITED STATES OF AMERICA.

Inventor: ERWIN JOSEPH NUNLIST

Application for Patent No 981/Del/88 filed on 11th November, 1988

Divisional to application No. 214/Del/86 filed on 7th March, 1986.

Ante-dated to 7th March, 1986

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005

**2 Claims**

An apparatus for holding a sensing probe operable from the exterior of a closed fluid container to insert and withdraw a sensor probe, respectively, into and out of said closed fluid container said apparatus comprising a holder means for holding said sensor probe whereby a sensor tip is exposed to the interior of said closed fluid container, said sensor probe being cylindrical and comprising a sensor tube, and said sensor tip mounted to the end of said sensor tube and conduit means connected to said sensor tip and extending through the sensor tube which is enclosed by said holder means, a compressible seal means sealing the junction between said holder means and said exposed sensor tip and means mounted on said sensor probe for continuously exerting linear axial thrust to said sensor tube resulting in compression force being applied to said seal means, and means mounted on said holder means sealably through the wall of said closed fluid container and positioning said sensor tip in substantial contact with fluid within said closed fluid container, characterised in that said means mounted on said holder means sealably through the wall of said closed fluid container comprises: a holder flange means mounted to the end of said holder means, said holder flange means for being positioned adjacent to said wall of said closed fluid container; wall flange means for surrounding an aperture through said wall, and for being mounted to said wall to sealably mate with said holder flange means; gasket means interposed between said holder flange means and said wall flange means; and compression means to apply force to said holder flange means resulting in the compression of said gasket means and formation of a fluid tight seal between said holder flange means and said wall flange means with said gasket means therebetween.

Compl. Specn. 25 Pages.

Drgs. 2 Sheets.

Ind. Cl. 32 Fx0

169195

Int. Cl. C 07C 16/00

**AN IMPROVED PROCESS FOR THE PREPARATION OF DIALKYL ARYL ACETAMIDES**

Applicant: ADDITIONAL SECRETARY, DEFENCE RESEARCH, MINISTRY OF DEFENCE, GOVERNMENT OF INDIA, NEW DELHI, INDIA.

Inventor : RAO KARUMURU MAILIKARJUNA.

Application for Patent No 1042/Del/88, filed on 29th November, 1988.

Divisional to Appln. No 782/Del/86 filed on 2nd September, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi

#### 5 Claims

An explosive composition comprising 85 to 98 per cent by weight of a discontinuous oxidizer phase comprising at least one oxygen-supplying component of the kind such as herein described and 2 to 15 per cent by weight of a continuous organic phase comprising at least one water-immiscible organic liquid of the kind such as herein described containing at least one nitrogen-containing emulsifier said emulsifier being present in an amount of from 4 to 40% by wt. of said organic phase and being a derivative of

(A) at least one carboxylic acylating agent,

(B) at least one polyamine, and

(C) at least one acid or acid producing compound capable of forming at least one salt with said polyamine

Compl. Specn. 7 Pages.

Ind. Cl. : 39 P [GROUP III]  
Int. Cl.<sup>4</sup> : C04B 11/02

169196

A METHOD AND APPARATUS FOR CALCINING CALCIUM SULPHATE DIHYDRATE OR GYPSUM.

Applicant : BPL INDUSTRIES PUBLIC LIMITED COMPANY, A BRITISH COMPANY, OF LANGLEY PARK HOUSE, UXBRIDGE ROAD, SLOUGH, SL3 6DU, ENGLAND

Inventors : (1) DAVID JOHN BAILL, (2) EDWARD VARNEY.

Application for Patent No. 1/Mas/87, filed on 1st January, 1987.

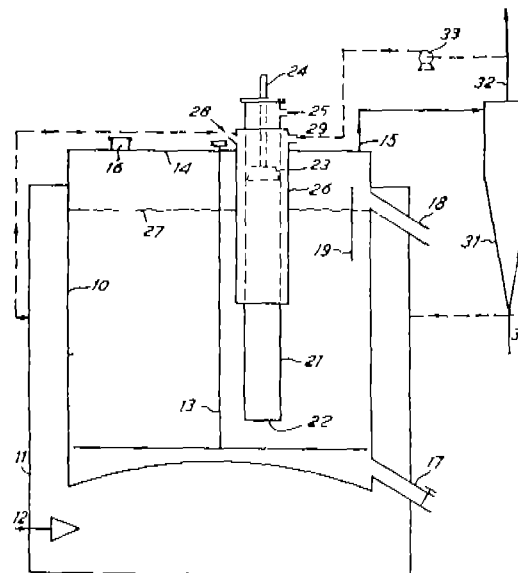
Convention date 7th January, 1986 No. 96/8275 (Great Britain).

Appropriate Office for Opposition Proceedings (Rule 4 Patents Rules, 1972), Patent Office Branch, Madras.

#### 7 Claims

An apparatus for calcining calcium sulphate dihydrate comprising a vessel for containing a bed of calcium sulphate dihydrate an inner tube extending downwardly from the top of the vessel having at least one opening in its lower region for the direct introduction of hot gas into the bed, an outer tube surrounding part of the inner tube

along its length extending from the top of the lid of the vessel, to a level below the top of the bed having means for introducing one or more cool compatible substance selected from fresh calcium sulphate dihydrate, relatively cool exhaust gas from the bed after separation of the dust and dust separated from the exhaust gas from the bed; into an upper region of the said outer tube.



Compl. Specn. 13 Pages

Drgs. 2 Sheets.

Ind. Cl. : 40-E—[GROUP-IV(1)].  
Int. Cl.<sup>4</sup> : C07C 27/26; 27/32.

169197

AN APPARATUS FOR PREPARING ETHANOL SUBSTANTIALLY FREE OF WATER FROM A MIXTURE CONTAINING WATER AND ETHANOL.

Applicant : UNITED DISTILLERS PLC, A BRITISH COMPANY, OF 33 ELLERSLEY ROAD, EDINBURGH EH12 6 JW, SCOTLAND.

Inventor : ALFRED GORDON WHELDON

Application for Patent No. 3/Mas/87, filed on 5th January, 1987.

Convention date : January 17, 1986; (No 8601081; Great Britain).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 4 Claims

An apparatus for preparing ethanol substantially free of water from a mixture containing water and ethanol comprising

a contactation column (8) having a first inlet (7) for the mixture containing ethanol and water, a second inlet (9) for liquid carbon dioxide below the first inlet, a second outlet for the stripped mixture below the second inlet, and a first outlet (10) for a solution of ethanol and liquid carbon dioxide above the first inlet;

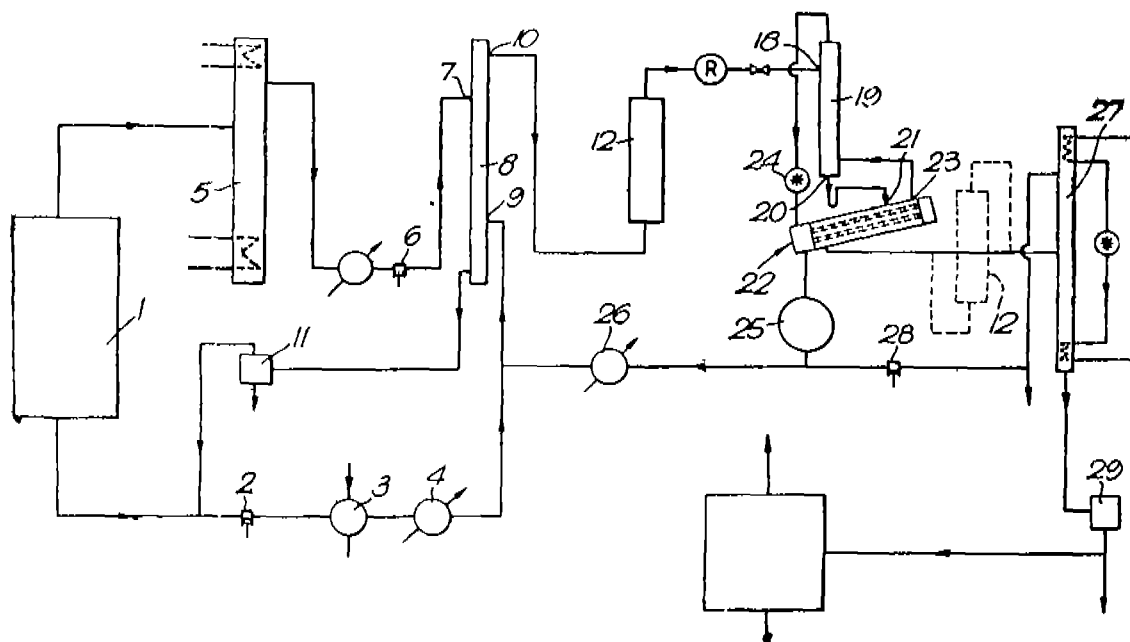
heat exchange means (22) having a liquid inlet, a first outlet, a vapour outlet, a vapour inlet and a second liquid outlet;

a tailing column (19) having a liquid inlet (18) and outlet (20) and a vapour inlet (23) and outlet, the vapour outlet from the tailing column is connected to the vapour inlet of the heat exchange means (22), the liquid outlet of the tailing column is connected to the liquid inlet (21) of the heat exchange means and the vapour outlet of the heat exchange means is connected to the vapour inlet (23) of the tailing column;

conduit means connected between the second liquid outlet of the heat exchange means and the second inlet (9) of the contactation column;

a distillation column (27) having a liquid inlet, a vapour outlet located at its top and a liquid outlet at its base from which water free ethanol is recovered; and

a dryer having an adsorbent material, the dryer having an inlet and an outlet and being connected in series between the first outlet (10) of the contactation column and the liquid inlet (18) of the tailing column or connected between the first liquid outlet of the heat exchange means and the liquid inlet of the distillation column (27).



Compl. Specn. 19 Pages.

Drgs. 3 Sheets.

Ind. Cl.: 40-B—[GROUP-IV(1)]  
Int. Cl.: C 10 G 45/52; 45/54; 45/58.

169198

# A PROCESS FOR ISOMERISING ETHYL BENZENE AND XYLENE.

Applicant: MOBIL OIL CORPORATION, A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA, OF 150 EAST 42ND STREET, NEW YORK, NEW YORK 10017, UNITED STATES OF AMERICA.

Inventors: (1) RENE BERNARD LAPIERRE, (2) YUNG-FENG CHU, (3) CHARLES THEODORE KRESGE.

Application for Patent No. 14/Maa/87, filed on 12th January, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 7 Claims

A process for isomerizing ethyl benzene and xylene from a feed which contains an aromatic C<sub>8</sub> hydrocarbon mixture of ethylbenzene and xylene having lower para-xylene content than at the thermal

equilibrium comprising contacting a feed at a temperature of 200° to 540° C and pressure of 100 to 7000 kPa, a WHSV of 0.5 to 100 and a H<sub>2</sub>/HC molar ratio of 0.5 to 10 with a two component catalyst system having compound (1) and compound (2) wherein

component (1) comprises a zeolite ZSM-5 having a crystal size with a minimum dimension greater than 1 micron, a constraint index of 1 to 12 and an ortho-xylene sorption time greater than 50 minutes based on its capacity to sorb 30% of the equilibrium capacity of ortho-xylene at 120° C and at an ortho-xylene partial pressure of 4.5±0.8 and 0.05 to 10 wt% of a hydrogenation component selected from platinum, palladium, indium, rhenium and rhodium; and

component (2) comprises a zeolite ZSM-5 having a crystal size with a minimum dimension less than 0.1 micron, a constraint index 1 to 12 and a ortho-xylene sorption capacity greater than 1 gram/100 grams of zeolite and an ortho-xylene absorption time for 30 per cent of said capacity of less than 10 minutes, where the sorption capacity and sorption times are measured at 120° C and a xylene pressure of 4.5±0.8 mm of mercury and comprises 0.05 to 10 weight per cent of a hydrogenation component selected from platinum, palladium, indium, rhenium, and rhodium wherein component (2) constituting at least 50 per cent by volume of the catalyst system.

Compl. Specn. 19 Pages.

Drgs. 3 Sheets.

Ind. Cl. : 39-K—[GROUP-III]  
Int. Cl.<sup>4</sup> : C01B 25/222.

169199

## PROCESS FOR MAKING CRUDE PHOSPHORIC ACID.

Applicant : HOECHST AKTIENGESELLSCHAFT, OF D 6230, FRANKFURT/MAIN 80, FEDERAL REPUBLIC OF GERMANY, A CORPORATION ORGANIZED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY.

Inventors : (1) GUNTHER SCHIMMEL, (2) FRIEDRICH KOLKMANN, (3) REINHARD GRADL, (4) HERBERT RESSEL.

Application for Patent No. 40/Mas/87, filed on 21st January, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 2 Claims

A process for making crude phosphoric acid by reacting phosphate ore containing sulfide with sulfuric acid in a closed system having a processing reactor, a filtering zone and an off-gas scrubbing zone characterized in that soluble copper salt is added either in the processing reactor or off-gas scrubbing zone, filtering off the resulting copper sulfide precipitate, and recovering the crude phosphoric acid in a known manner.

Compl. Specn. 12 Pages.

Drg. NIL.

Ind. Cl. : 98-E—[GROUP-VII(2)]  
Int. Cl.<sup>4</sup> : C 12 M 1/40.

169200

## STERILIZABLE FLUIDIZED BED FERMENTER.

Applicant : HOECHST AKTIENGESELLSCHAFT, OF D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY, A CORPORATION ORGANIZED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY.

Inventors : (1) RAINER BUCHHOLZ, (2) HANS-MATTHIAS DEGER, (3) HARTMUT VOELSKOW, (4) ROLF WOERNLE.

Application for Patent No. 41/Mas/87, filed on 21st January, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 4 Claims

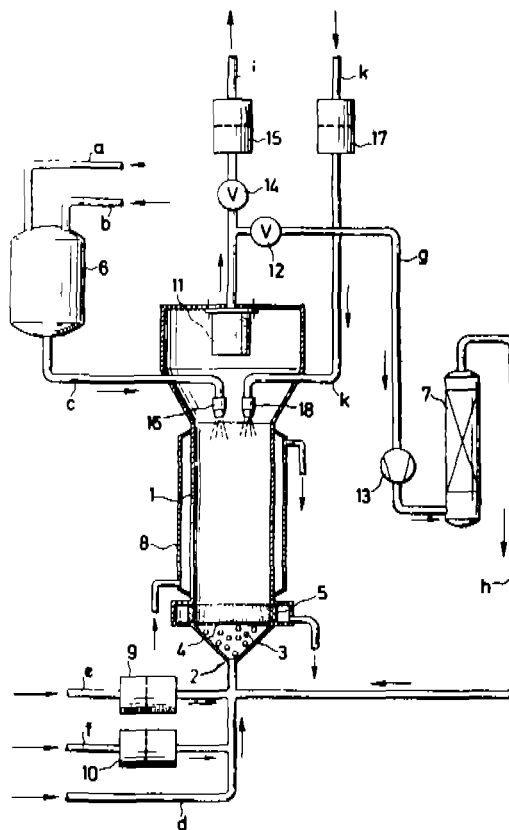
A sterilizable fluidized bed fermenter for carrying out low-moisture fermentations, wherein

- (a) the fluidized bed fermenter (1) has at the bottom an orifice (2) for introducing a stream of gas, and an inlet bottom section (3) with a perforated or sintered disk (4) for distributing the stream of gas,
- (b) one or more filter elements (5) are mounted on the side of the bottom part of the fluidized bed fermenter to draw off the used culture broth under sterile conditions,

(c) a reservoir (6) provided with a steam line (a) and a substrate line (b), for spraying nutrient solution through a line (c) and a nozzle (16).

(d) a temperature-controllable air humidifier (7), and

(e) a device for introducing superheated steam such as a jacket heat-exchanger or a heating element (8) for sterilizing the fluidized bed fermenter.



Compl. Specn. 13 Pages.

Drg. 1 Sheet.

Ind. Cl. : 4 A<sup>4</sup>; 116 G—[GROUPS-LIII(1); XLIX]  
Int. Cl.<sup>4</sup> : B 64 F 1/32; B 66 F 9/06; B 60 P 1/02

169201

## AIRCRAFT LOADER.

Applicant : FMC CORPORATION, A DELAWARE CORPORATION, OF 200 EAST RANDOLPH DRIVE, CHICAGO, ILLINOIS 60601, UNITED STATES OF AMERICA.

Inventors : (1) HOWARD ESTIL HOWELL, (2) WILLIAM CHRISTOPHER DEAN.

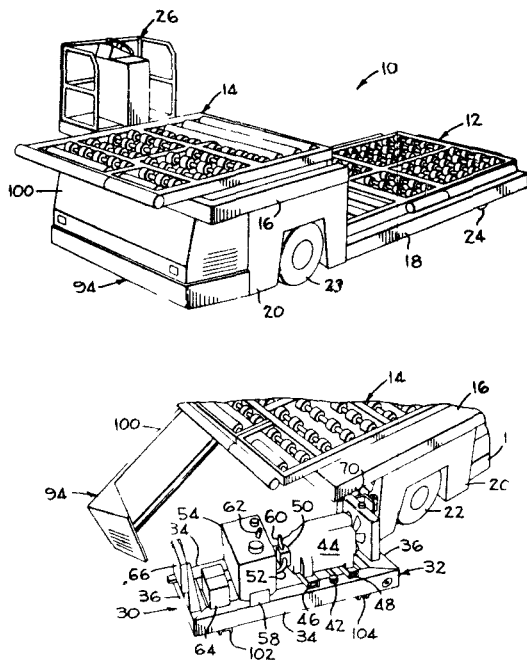
Application for Patent No. 58/Mas/87, filed on 29th January, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 9 Claims

An aircraft loader (10) comprising a mobile frame (18, 20) having vertical posts (86) on the forward right and left sides of the mobile

frame and a swingable cover (94) hinge connected (96, 98) to one of the posts, hydraulic activated components supported on the said mobile frame, and a power module (30) having an engine (44), a hydraulic pump (50) for supplying fluid to the components driven by the engine, a hydraulic fluid reservoir (54) for supplying fluid to the pump, and a fuel tank means (34, 36, 40) for supplying fuel to the engine wherein the power module is mounted to a removable rectangular frame (32) having hinges (76/80, 78/82) connected to a second post (84) for swinging about a vertical axis between a normal operating position adjacent to the two vertical posts of the mobile frame (20) and a servicing position laterally outwardly of the second post and the said swingable cover (94) has a bumper (100) for shielding the rectangular frame from impact loads in the normal operating position.



Compl. Specn. 12 Pages.

Drgs. 2 Sheets.

Ind. Cl.: 40-F—[GROUP-IV(1)].  
Int. Cl.: B 01 J 8/08.

169202

#### APPARATUS FOR CONTACTING GAS, LIQUID AND SOLID PARTICLES.

Applicant · SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., OF CAREL VAN BYLANDTLAAN 30, 2596 HR THE HAGUE, A NETHERLANDS COMPANY.

Inventors : (1) FRANCISCUS HENRICUS JOZEPHUS BUKKEMS, (2) PETRUS MATTHIAS MARIE BLAUWHOFF, (3) ARIE CORNELIS VAN'T HOOG.

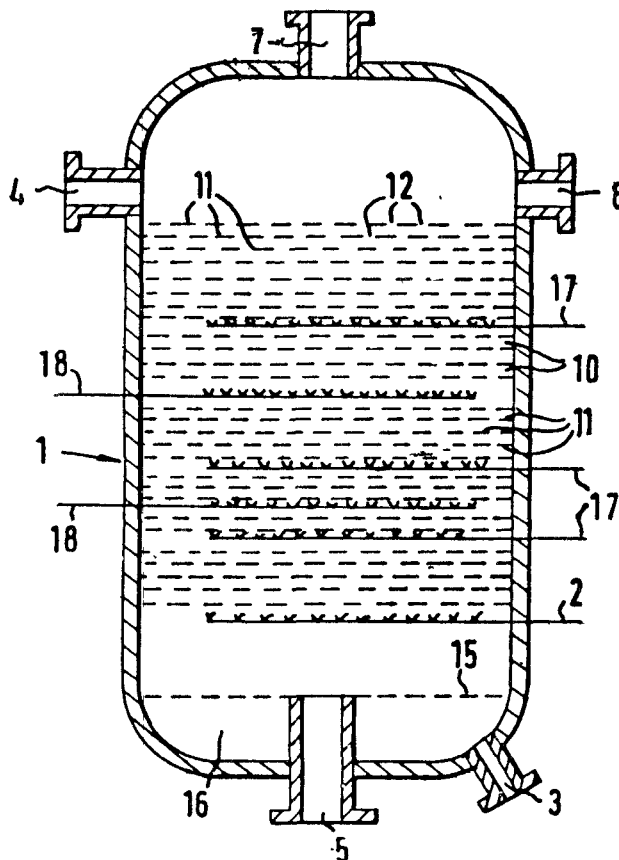
Application for Patent No. 61/Mas/87, filed on 30th January, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 5 Claims

An apparatus for contacting gas, liquid and solid particles comprising a reactor (1) provided with inlets (2, 3) for gas and liquid at the lower part of the reactor, inlet (4) for solid particles at the upper part of the reactor, outlet (5) for solid particles at the lower part of the reactor, outlets (7, 8) for gas and liquid at the upper part of the reactor and a contact zone having a plurality of screens arranged one above the

other at a distance of between 0.5 and 20 cms wherein each of the screen is having a plurality of apertures with an area per aperture of between 0.05 cm<sup>2</sup> and 5 cm<sup>2</sup>, the ratio between the sum of the areas of the apertures and the total area of the screen lying between 0.4 and 0.8.



Compl Specn. 9 Pages.

Drg 1 Sheet.

Ind. Cl.: 10-B—[GROUP-XXXIX(2)]  
Int. Cl.: C 06 C 7/00.

169203

#### AN EXPLOSIVE DELAY DETONATOR.

Applicant · DYNAMIT NOBEL AKTIENGESellschaft, A COMPANY ORGANISED AND EXISTING UNDER THE LAWS OF FEDERAL REPUBLIC OF GERMANY, OF POSTFACH 1261, 521, TROISDORF, FEDERAL REPUBLIC OF GERMANY.

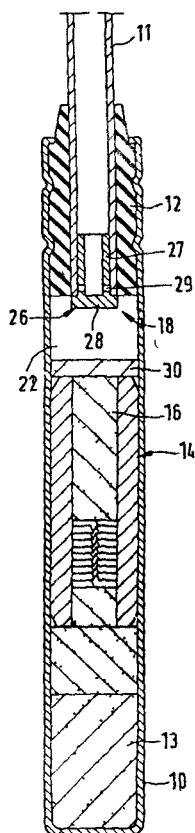
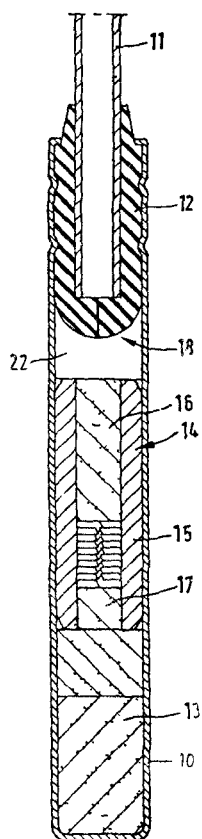
Inventor · HANS FLORIN.

Application for Patent No 72/Mas/87, filed on 4th February, 1987

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 7 Claims

An explosive delay detonator comprising a casing (10), which contains a base charge (13), followed by a delay means (14) and into one end of which an ignition transmission tube (11) leads through a sealing plug (12), for transmitting a detonation flame emerging from the ignition transmission tube (11) through the said delay means (14) to detonate the said base charge (13) after a predetermined delay time and a non-return valve (18) disposed between the tube (11) and the delay means (14) allowing the detonation flame and gas to pass only in the direction from the tube (11) to the delay means (14).



Compl Specn 10 Pages.

Drgs 2 Sheets.

Ind Cl 4 A—[GROUP-LIII(1)]  
Int Cl<sup>4</sup> B 64 D 47/00, B 64 D 47/02

169204

# AN APPARATUS FOR PREVENTING BIRD COLLISIONS WITH AIRCRAFT DURING THE TAKE-OFF AND LANDING PHASES OF THE AIRCRAFT AND DURING FLIGHT

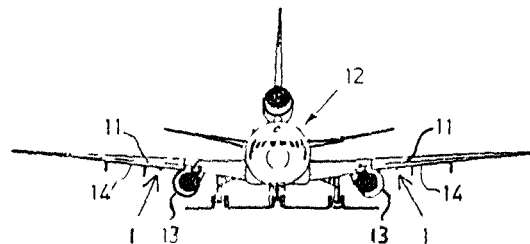
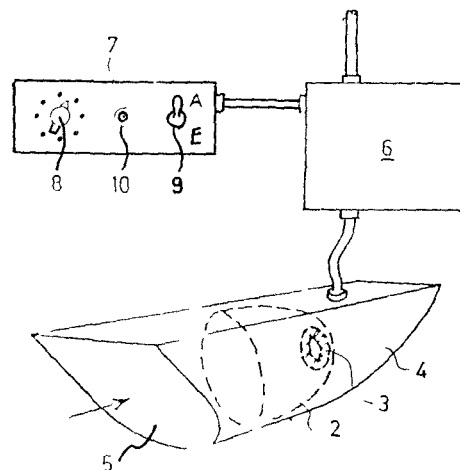
Applicant & Inventor RUDIGER STEFFEN OF HALDENSTRASSE 673 CH-8425 OBEREMBRACH, SWITZERLAND A GERMAN CITIZEN

Application for Patent No 73/Mas/87, filed on 4th February 1987

Appropriate Office for Opposition Proceedings (Rule 4 Patents Rules, 1972), Patent Office, Madras Branch

## 6 Claims

An apparatus for preventing bird collisions with aircraft during the take-off and landing phases of the aircraft and during flight, said apparatus comprising a light source, a control unit comprising a microprocessor having programmable memory means storing a plurality of preset programs, said control unit activating said light source during cycles of varying duration and producing light flashes of variable frequencies according to said preset programs, and a program selection means for individually selecting a preset program to activate said light source according to a preset cycle time and flashing frequency



Compl Specn 16 Pages

Drg 1 Sheet

Ind Cl 69-I—[GROUP-LIX(1)]  
Int Cl<sup>4</sup> H 01 H 15/02

169205

# AN EXTRACTIBLE MULTIPOLE ELECTRICAL CIRCUIT BREAKER WITH A REVERSIBLE DRAW-IN AND DRAW-OUT MECHANISM

Applicant: MERLIN GERIN, OF RUE HENRI TRAZE-38050 GRENOBLE CEDEX, FRANCE, OF FRENCH NATIONALITY.

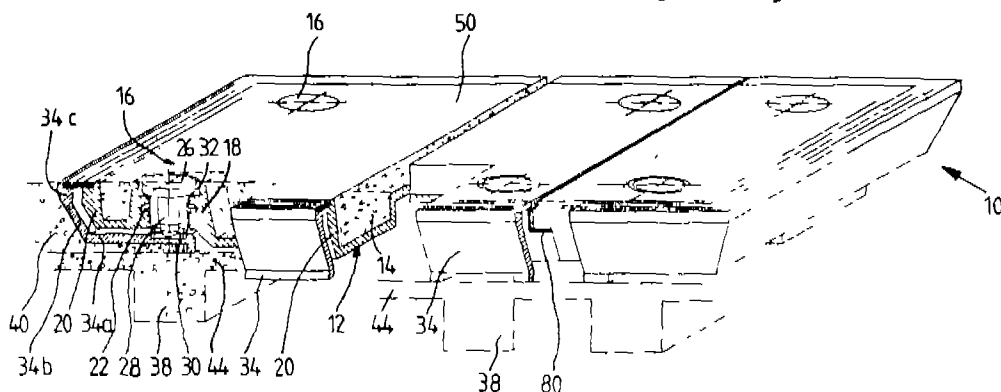
Inventors: (1) ALAIN GERBERT-GAILLARD, (2) JEAN-PIERRE NEBON.

Application for Patent No. 74/Mas/87, filed on 4th February, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

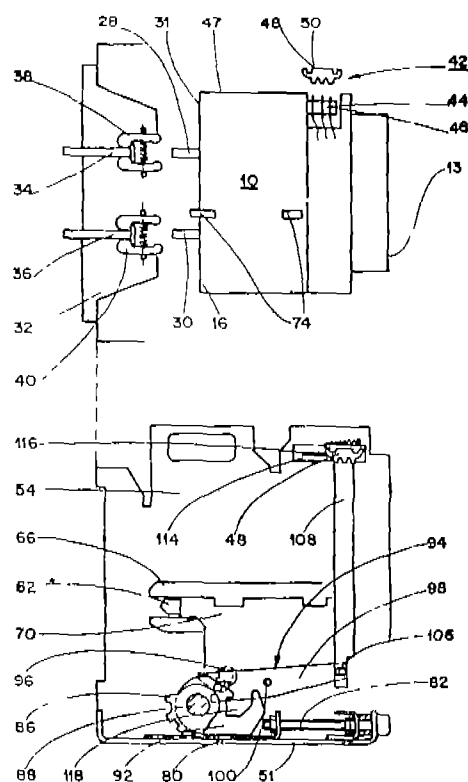
### 11 Claims

An extractible multipole electrical circuit breaker with a reversible draw-in and draw-out mechanism equipped with main circuits with terminals and auxiliary circuits associated with a connection device having fixed connectors and interacting movable connectors, the circuit breaker being mounted on a movable mechanical support inside a fixed chassis in the form of a housing having a front opening, two opposite side walls, and a fixed rear support panel for connection of the main terminals of each pole, the mechanical support of the circuit breaker being guided by means of a pair of slide plates symmetrically fixed to the side walls of the chassis, and extending parallel in the longitudinal draw-in direction, said draw-in and draw-out mechanism comprising an operating device associated with a movement transmission system capable of occupying a first "draw-in" position in which the main and auxiliary circuits of the circuit breaker are connected, a second "test" position in which the main circuits are disconnected and the auxiliary circuits are connected, and a third "drawn-out" position in which the main and auxiliary circuits are disconnected, wherein the fixed connectors of the auxiliary circuits connection device are securely united to the circuit breaker and the movement transmission system of the reversible mechanism comprises a first mechanical link between the operating device and a drive device of the movable connectors of the connection device during the actuation phase corresponding to the interval provided between the second and third positions, and a second mechanical link between the operating device and a coupling device of the movable mechanical support of the circuit breaker during another actuation phase corresponding to the interval provided between the second and first positions, the assembly being arranged so that the first mechanical link is active when the second mechanical link is broken, and vice-versa, enabling the fixed and movable connectors of the auxiliary circuits to be connected or disconnected when the circuit breaker remains immobile.



Compl. Specn. 21 Pages.

Drgs. 3 Sheets.



Compl. Specn. 29 Pages.

Drgs. 13 Sheets.

Ind. Cl.: 204 [GROUP-XLI(10)]

169206

Int. Cl. 4: G 01 G 19/02; G 01 G 21/00.

### PLATFORM WEIGHING APPARATUS.

Applicant: PFISTER GMBH, A GERMAN COMPANY OF STATZLINGER STR. 70, D-8900 AUGSBURG, FEDERAL REPUBLIC OF GERMANY.

Inventor: HANS W. HAFNER.

Application for Patent No. 76/Mas/87, filed on 4th February, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 11 Claims

A platform weighing apparatus comprising a platform structured by including cavities and pre-fabricated of polymeric concrete by moulding; a base means; and force measuring elements arranged between said platform and said base means.



Ind. Cl. : 107-F—[GROUP-XLVI(2)]  
Int. Cl.<sup>4</sup> : H 01 T 13/02.

169207

**CONTACT-BREAKING IGNITION PLUG.**

Applicant : LACREX BREVETTI S.A., OF VIA ECOCASA LUCE, CH-6644 ORSELINA/TL, SWITZERLAND, A SWISS COMPANY.

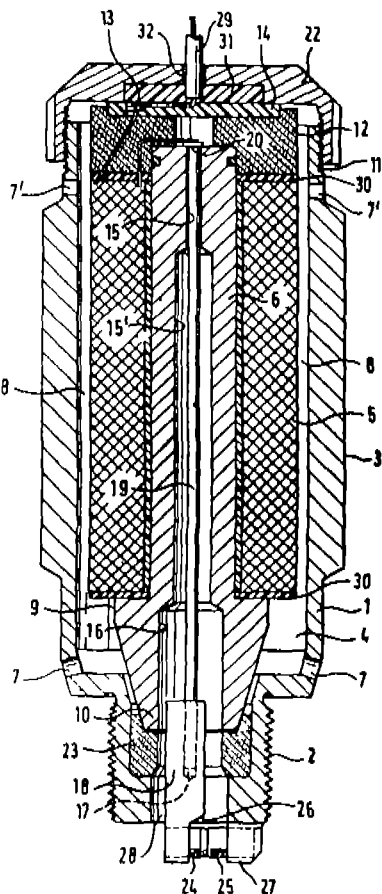
Inventor : MAX PASBRIG.

Application for Patent No. 77/Mas/87, filed on 5th February, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

**9 Claims**

A contact-breaking ignition plug for generating ignition spark comprising a housing defining a longitudinal axis; said housing having a threaded lower portion; a magnet coil for an electromagnet arranged along said longitudinal axis; a magnet core for said electromagnet arranged within said magnet coil; an elastic rod arranged within said magnet core along said longitudinal axis; an armature fixed to said elastic rod and located within the magnetic field of the electromagnet; first and second electrodes arranged outside said magnet core and forming a portion of said short circuit path; said magnet core at a point outside said magnet coil having an enlargement containing a cavity; and said elastic rod being connected with said armature and with said first electrode beyond said magnet core.



Compl. Specn. 21 Pages.

Drgs. 3 Sheets.

4-G-237 GI/91

Ind. Cl. : 33-F—[GROUP-X\XIII(3)]  
Int. Cl.<sup>4</sup> : B 22 D 27/20.

169208

**A MOULD FOR CASTING MOLTEN FERROUS METAL.**

Applicant : FOSECO INTERNATIONAL LIMITED, A BRITISH COMPANY OF 285 LONG ACRE, NECHILLS, BIRMINGHAM, B7 5JR, ENGLAND.

Inventor : PIERRE VERNAY.

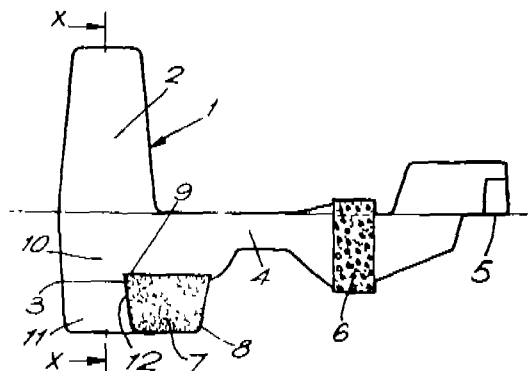
Application for Patent No. 92/Mas/87, filed on 10th February, 1987.

Convention date : February 25, 1986; (NO. 8604569; Great Britain)

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

**12 Claims**

A mould for casting molten ferrous metal having a mould cavity and a runner system characterized in that it comprises a sprue, a sprue well and a runner, the mould having located in the runner a ceramic filter having an open-cell structure, and located in a chamber in the runner system on that side of the filter which is further from the mould cavity a sealed plastics container containing particles of a treatment agent having a size of 10 mm for the molten ferrous metal such that part of the container is in the sprue well.



Compl. Specn. 17 Pages.

Drg. 1 Sheet.

Ind. Cl. : 129-Q—[GROUP-XXXV]  
Int. Cl.<sup>4</sup> : B 23 K 35/22.

169209

**AN AGGLOMERATED FLUX FOR ELECTRIC ARC WELDING.**

Applicant : THE LINCOLN ELECTRIC COMPANY, A CORPORATION OF THE STATE OF OHIO, U.S.A. OF A. 22801 ST. CLAIR AVENUE, CLEVELAND OHIO 44117, UNITED STATES OF AMERICA.

Inventors : (1) ROBERT J. WEAVER, (2) RONALD F. YOUNG, (3) DENNIS D. CROCKETT.

Application for Patent No. 93/Mas/87, filed on 11th February, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 4 Claims

An agglomerated flux for electric arc welding comprising 11 to 25 weight percent of calcium oxide, 18 to 30 weight percent of titanium oxide, 30 to 71 weight percent of one or more oxides of the elements selected from aluminium, magnesium, silicon, strontium, sodium, zirconium, manganese and potassium, and 0 to 15 weight percent of one or more fluorides of elements selected from sodium, potassium, barium, aluminium, magnesium, strontium, and lithium.

Compl. Specn. 12 Pages.

Drg. NIL.

Ind. Cl.: 172-B—[GROUP-XX]  
Int. Cl.<sup>4</sup>: D 01 D 5/06.

169210

#### A PROCESS FOR PREPARING ACRYLIC FIBRES BY WET-SPINNING.

Applicant: ENICHEM FIBRE S.p.A., A COMPANY ORGANIZED UNDER THE LAW OF THE ITALIAN REPUBLIC OF VIA RUGGERO SETTIMO, 55—PALERMO, ITALY.

Inventors: (1) FRANCO COGNIGNI, (2) ETTORE SCIOLLA.

Application for Patent No. 96/Mas/87, filed on 13th February, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 6 Claims

A process for preparing acrylic fibres by wet-spinning comprising the steps of extruding in a coagulum bath a solution of an acrylonitrile polymer in a highly polar, aprotic organic solvent selected from dimethylformamide, dimethylacetamide and dimethylsulphoxide, stretching the coagulated fibre and dyeing same, wherein a fibre retraction step is interposed between the fibre stretching step and the fibre dyeing step, said fibre retraction step being carried out by contacting the stretched fibre with an aqueous solution containing from 10% to 80% by weight of dimethylformamide, dimethylacetamide or dimethylsulphoxide at a temperature of from 100°C to 120°C, preferably from 105°C to 110°C, to induce in the stretched fibre a retraction of from 25% to 40%, and preferably from 30% to 38%.

Compl. Specn. 13 Pages.

Drg. NIL.

Ind. Cl.: 128-K & G—[GROUP-XIX(2)]  
Int. Cl.<sup>4</sup>: A 61 B 17/08,  
17/10

169211

#### A BONE STAPLER.

Applicant: MINNESOTA MINING AND MANUFACTURING COMPANY OF 3M CENTER, SAINT PAUL, MINNESOTA 55144-1000, U.S.A. A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE.

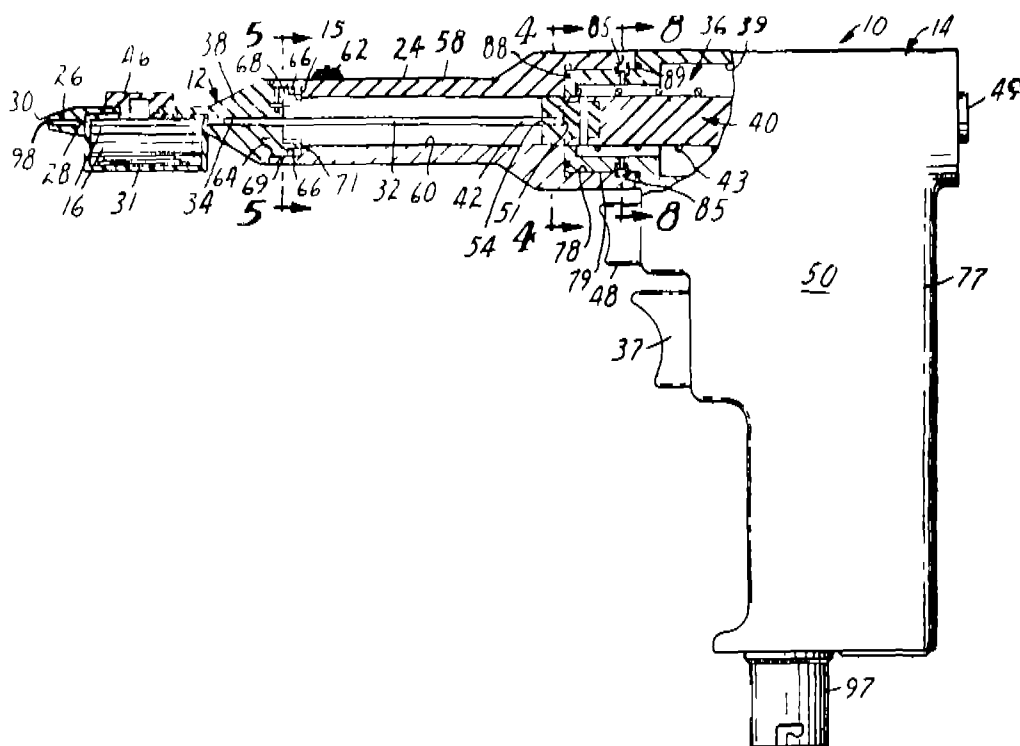
Inventor: DOUGLAS RAYMOND MONGEON.

Application for Patent No. 99/Mas/87, filed on 13th February, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 2 Claims

A bone stapler adapted for use with generally U-shaped staples each having a central portion and two generally parallel leg portions projecting generally in the same direction from opposite ends of its central portion and having distal ends, the said stapler comprising a barrel assembly having a first housing part with a passageway extending from an inlet opening to an outlet opening for guiding a single staple from the inlet to the outlet opening with the distal end of its legs leading, and defining a socket for releasably receiving a cartridge containing staples at said inlet opening; an elongate driver having an axis, an inner end portion, and an opposite contact end portion for engaging the central portion of said staple, said driver being mounted on said first housing part for longitudinal sliding movement between a load position with the driver spaced from the socket and inlet opening to afford movement of one of the staples into the passageway, along said passageway with said contact end portion pushing the staples to an eject position at which the contact end portion of the driver pushes the staple out said outlet opening while restricting rotation of said driver relative to said first housing part; a handle assembly having a second housing part; and drive means with a piston assembly having an axis, mounted on said second housing part, and adapted to be manually activated for moving said piston assembly between first and second position; and means for releasably attaching together said barrel assembly and said handle assembly having means for releasably attaching together said first and second housing parts and for releasably attaching together said piston assembly and the inner end portion of said driver so that movement of said piston assembly between said first and second position will cause corresponding movement of said driver between said load and eject position to move said staple from said inlet to said outlet opening; characterised in that said inner portion (42) of said driver (32) being plate-like, has an end surface (51), and has at least one opening (52) spaced from said end surface (51); said piston assembly (40) having an end portion with walls defining a transverse slot (54) receiving the inner end portion (42) of said driver (32), and having at least one pin (56) projecting from one of said walls into said slot (54) at a position spaced from the axis of said piston assembly (40) and in a direction generally normal to the axis of said piston assembly (40), said slot being shaped to afford rotational movement of said inner end portion (42) of said driver (32) about said axis within said slot (54) between a release position with said pin (56) spaced from said opening (52), and an engaged position with said pin (56) positioned within said opening (52) to provide said means for releasably attaching together said piston assembly (40) and the inner end portion of said driver (32); said second housing part (50) has a first housing portion (58) guiding the end portion of said piston assembly (40) for movement between said first and second positions while preventing relative rotation between said first housing portion (58) and said end portion of said piston assembly (40); said means for fastening together said first and second housing parts (38, 50) comprises structures on said housing parts (38, 50) engageable at an engaged position at which said inner end portion (42) of said driver (32) is positioned in said slot (54) in said release position of said driver (32), and relatively movable to a lock position at which said housing parts (38, 50) are immovable in the axial direction of said driver and piston assemblies (32, 40) moving said inner end portion (42) of said driver (32) and said end portion of the piston assembly (40) to said engaged position; and means for releasably retaining said housing parts (38, 50) in said lock position.



Compl. Specn. 24 Pages.

Drg. 1 Sheet.

Ind. Cl. : 85-L—[GROUP-XXXI].  
Int. Cl. : F 23 G 5/04.

169212

# AN IMPROVED REFUSE INCINERATION SYSTEM FOR GENERATING HIGH-PRESSURE SUPERHEATED STEAM.

Applicant & Inventor : TSUNG-HSIEN KUO, RESIDING AT NO. 5, ALLEY 57, LANE 158, MI TOU RD., CHA-YI CITY, TAIWAN, R.O.C., OF CHINESE NATIONALITY.

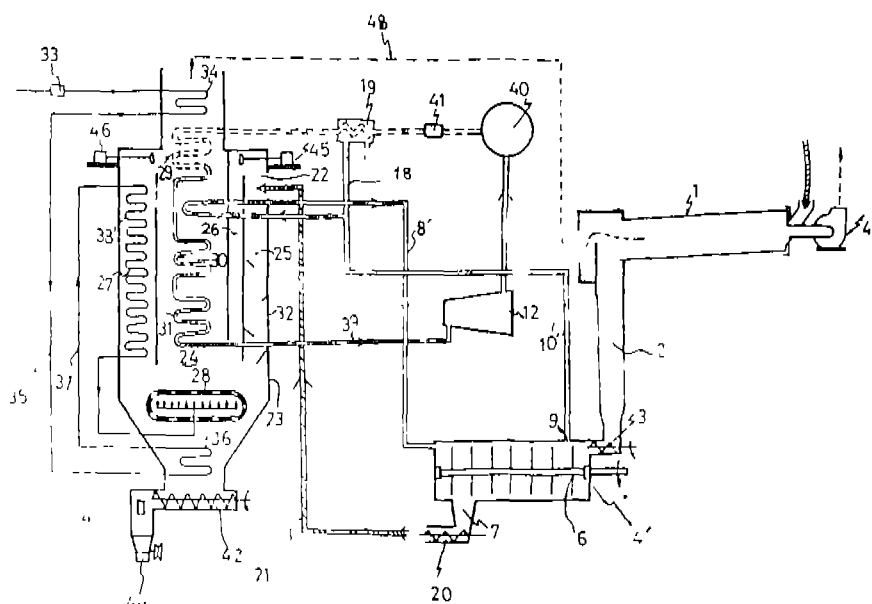
Application No. 102/Maa/87, filed on February 16, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 2 Claims

An improved refuse incineration system for generating high-pressure superheated steam comprising a continuous dryer consist-

ing of a moving rake for drying refuse with superheated steam, an infeed screw means for squeezing refuse into one end of said dryer, and outlet screw means for squeezing off said refuse at the other end of said dryer, a vent means for discharging the superheated steam after drying, a continuous preheater with moving rake for preheating refuse with the stack gas before passing said refuse to said dryer; a boiler feed-water heater means for using part of the super-heated steam discharged from said vent means of said dryer to increase the temperature of boiler feed-water; a furnace having a drying chamber and drying gas return chamber, means for using the combination gas to dry said entrance refuse, a combustion chamber containing a horizontal rotating burning grate means for receiving said refuse, a boiler means for generating high-pressure superheated steam in said combustion chamber, a low-pressure super-heated steam heater, means for reheating part of the superheated steam discharged from said vent means of said dryer, a stack gas air preheater means for using the stack gas to preheat the air used for supporting combustion in said chamber; and an air preheating chamber, means for using the combustion gas to preheat the air coming from said stack gas air preheater used for supporting combustion in said furnace.



Compl. Specn. 9 Pages

Drsg. 1 Sheet

Ind. Cl.: 63 H, 126 A [GROUPS LVII (1), LVIII (6)]  
Int. Cl.: G 01 N 27/72; G 01 R 33/12.

169213

AN APPARATUS FOR MAGNETOSTRUCTURAL MATERIALS INVESTIGATION AND NON-DESTRUCTIVE MATERIALS TESTING OF DIAMAGNETIC, PARAMAGNETIC FERROMAGNETIC AND FERRIMAGNETIC MATERIALS

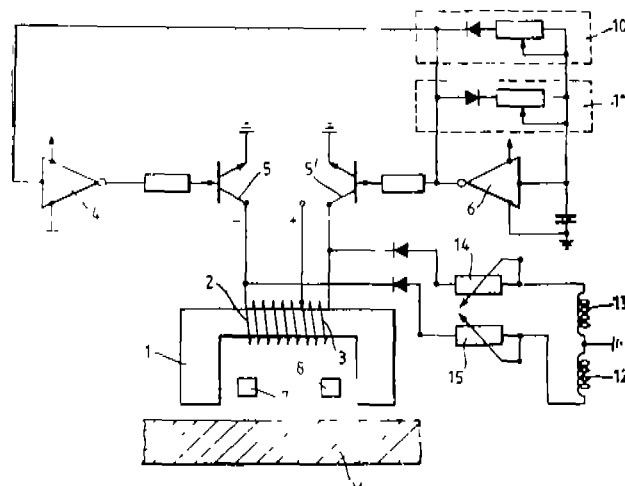
Applicants & Inventors: JULIUS HARTAL, OF B KJEDSBERGS VEI 232 C, N-3000 DRAMMEN; TERJE OLSEN, OF AEGERS VEI 33, N-5071, LODDEFJORD; NILS CHR. LEKVIN, OF HAUGE, N-5200, OS, ALL OF NORWAY AND OF NORWEGIAN NATIONALITY

Application No 103/Mas/87, filed on February 16, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

4 Claims

An apparatus for magnetostuctural materials investigation and non-destructive materials testing of diamagnetic paramagnetic ferromagnetic and ferrimagnetic materials, comprising at least one electromagnet provided with ferrite core and preferably 2 coils, located adjacent to a specimen of the material to be investigated; the coils of the electromagnet being connected to a pulse width controlled oscillator; each coil being provided with at least one oscillator for controlling the duration of the magnetization pulses and the demagnetization pulses, and detectors for performing the measurements, the detector outputs being connected to a recording device such as an oscilloscope, a comparator or a computer.



Compl. Specn 15 Pages

Drsg. 5 Sheets

Ind. Cl.: 33-D&H-[GROUP-XXXIII(3)].  
Int. Cl.: C 21 C 5/38.

169214

A METHOD AND APPARATUS FOR STRAND CASTING STEEL

Applicant: INLAND STEEL COMPANY, A DELAWARE CORPORATION U.S.A., OF 30 WEST MONROE STREET, CHICAGO, ILLINOIS 60603, U.S.A.

Inventor: JOHN L. MULESA.

Application No 105/Mas/87, filed on 17th February 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 4 Claims

A method for strand casting steel comprising the steps of

introducing a stream of molten steel from a ladle into a tundish with a cover having an opening located in a casting position below the ladle;

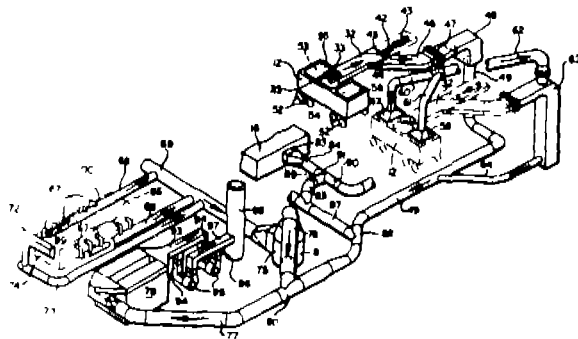
casting said molten metal into a strand at a location below the tundish;

spray cooling said strand downstream of the tundish;

torch cutting the strand downstream of said spray cooling step;

generating fumes at said torch cutting step which are relatively wet and cool;

collecting said gases containing said fumes from the torch cutting step at a first collecting location directly below the location where said torch cutting step is performed and at a second collecting location immediately downstream of the location where said torch cutting step is performed and above said first collecting location and directing the said gases through a bag house to clean the gases.



Compl. Specn 21 Pages.

Drg 1 Sheet.

Ind Cl : 102 B (GROUP XXIX (1)).  
Int Cl : F 15 B 21/00; F 15 C 3/00

169215

# CONTROL SYSTEM FOR INDEPENDENT CONTROL OF FLUID ACTUATED DEVICES

Applicant CATERPILLAR INC OF 100, N.E. ADAMS STREET, PEORIA, ILLINOIS 61629-6490, U.S.A. A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A.

Inventor : ALAN ROBERT COUTANT

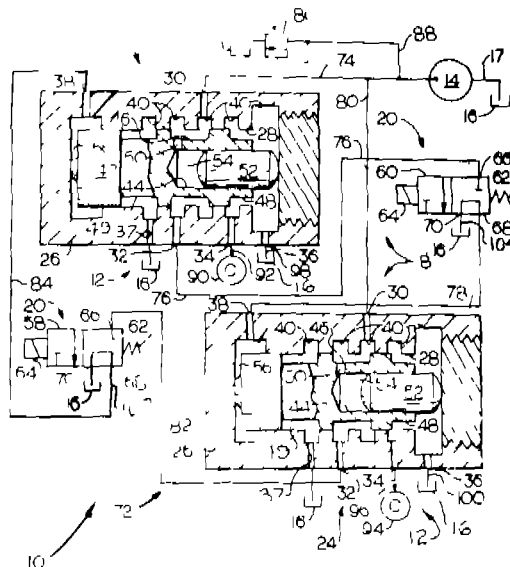
Application No 107/Mas/87, filed on 17th February, 1987.

Convention date 26-6-1986 No 512 556 (Canada).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 13 Claims

A fluid control system for selectively controlling actuation of a plurality of fluid actuated devices (12), comprising a source of pressurized fluid (14), a reservoir (16), characterised in that it is provided with a plurality of valve mechanisms (18), plurality of signal control devices (20) each for actuating the respective one of the plurality of valve mechanisms, means (72) for hydraulically interlocking a selected one of the plurality of control devices with respect to the source (14).



Compl. Specn 29 Pages.

Drgs 4 Sheets

Ind Cl : 24-D1—[GROUP LV]  
Int Cl : B 60 T 11/22

169216

# A METHOD OF MAKING A MASTER CYLINDER FOR VEHICLE BRAKE SYSTEM AND A MASTER CYLINDER MADE THEREBY

Applicant : LUCAS INDUSTRIES PUBLIC LIMITED COMPANY, A BRITISH COMPANY, OF GREAT KING STREET, BIRMINGHAM 19, ENGLAND

Inventor : WILLIAM JOHN PETER CONSTANCE

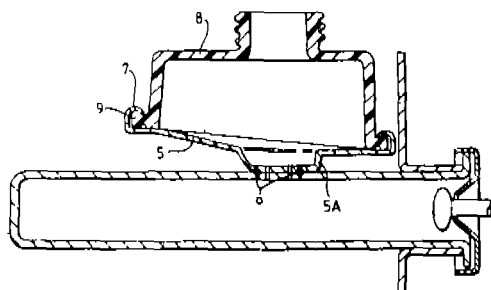
Application No. 114/Mas/87, filed on 20th February, 1987.

Convention date : March 1, 1986; (No. 8605114; Great Britain).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 16 Claims

A method of making a fabricated master cylinder comprising securing a base member to the outer surface of a pressure cylinder, forming a reservoir element by moulding plastics material and securing the reservoir element to the base member in fluid tight relationship by the inter engagement of respective portions of the reservoir element and the base member with the respective interiors of the reservoir element and base member in communication



Compl. Specn. 12 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 123 [GROUP I (4)].  
Int. Cl.<sup>4</sup> : C 05 G 1/08.

169217

#### A PROCESS FOR THE PREPARATION OF A GRANULAR FERTILIZER.

Applicant, BASF AKTIENGESELLSCHAFT, A GERMAN JOINT STOCK COMPANY, ORGANISED AND EXISTING UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY, WITH A REGISTERED OFFICE AT 6700 LUDWIGSHAFEN, FEDERAL REPUBLIC OF GERMANY.

Inventors : (1) ROBERT E. NITZSCHMANN (2) KARL HEINZ ZAPP (3) HERMANN POTTGIESSER.

Application No. 134/Mas/87, filed on 26th February, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

4 Claims

A process for the preparation of a granular fertilizer containing ammonium nitrate and calcium carbonate comprising heating calcium nitrate with ammonia and carbon dioxide in an aqueous solution, introducing the resulting calcium carbonate into a melt of ammonium nitrate having a concentration of 95—99% by weight of  $\text{NH}_4\text{NO}_3$  and converting the resulting slurry having a temperature of  $140^\circ$  to  $150^\circ \text{C}$  into granular form by prilling or granulation, wherein the calcium carbonate contains ammonium nitrate and water, with the proviso that the sum of the ammonium nitrate and water contents does not exceed 25% by weight, the water content is from 4 to 11% by weight and the ammonium nitrate content is not less than 1% by weight.

Compl. Specn. 9 Pages.

Drg. NIL.

Ind. Cl. : 132 D, [GROUP XXXIV (3)].  
Int. Cl.<sup>4</sup> : B 01 F 5/00.

169218

#### APPARATUS FOR MIXING FLUIDS.

Applicant : SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., A NETHERLANDS COMPANY OF CAREL VAN BYLANDT LAAN 30, 2596 HR THE HAGUE, THE NETHERLANDS

Inventor : PETER HADDON BARNES.

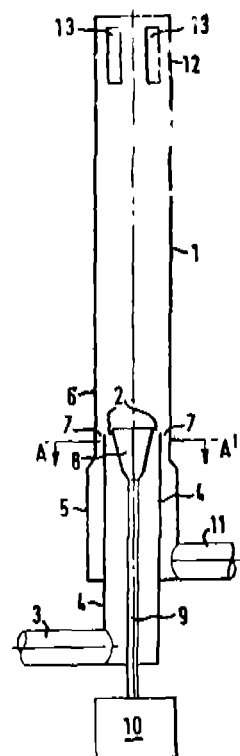
Application No. 215/Mas/87, filed on 25th March, 1987.

Convention dated 27-3-1986 No. 86 07699 (Great Britain)

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rule 1972), Patent Office, Madras Branch.

5 Claims

An apparatus for mixing fluids which comprises a tubular mixing section (1) having in its upstream end (6) an annular inlet opening (2) for the first fluid, the said annular inlet opening being formed by the wall of the tubular inlet means (4) and a deflection means (8), an inlet opening (3) for the first fluid is provided to the said tubular inlet means (4), an inlet means (7) for the second fluid is provided coaxial to the said annular inlet opening (2) formed by the wall of the second fluid inlet means (5) with an inlet opening (11) and the wall of the tubular inlet means (4), and an outlet opening is provided in the downstream of said tubular mixing section (1) for the fluid mixture.



Compl. Specn. 10 Pages.

Drgs. 3 Sheets.

Ind. Cl. : 40 B [GROUP IV (1)].  
Int. Cl.<sup>4</sup> : C 10 G 35/06

169219

#### A PROCESS FOR CATALYTIC REFORMING OF HYDROCARBONS.

Applicant : INSTITUT FRANCAIS DU PETROLE, A FRENCH BODY CORPORATE OF 1 ET 4, AVENUE DE BOIS PREAU, 92502 RUEIL-MALMAISON, FRANCE.

Inventors : (1) FRANCK JEAN-PIERRE (2) BOURNONVILLE JEAN-PAUL (3) BERTHELIN MAURICE.

Application No. 224/Mas/87, filed on 27th March, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 7 Claims

A process for catalytic reforming of hydrocarbons comprising circulating the hydrocarbon feed successively under known reforming conditions through at least two fixed bed catalysts containing catalyst A and catalyst B, each of said fixed bed catalysts consisting of a known carrier, 0.05 to 3% of platinum by weight of the carrier, 0.08 to 3% of rhenium by weight of the carrier and 0 to 15% of halogen by weight of the carrier as halogen compound or halogen, wherein the rhenium to platinum ratio in catalyst A being in the range 1 : 1 to 5 : 1 and the rhenium to platinum ratio in the catalyst B being in the range 0.1 : 1 to 3 : 1, to obtain reformed products of hydrocarbons.

Compl. Specn. 29 Pages.

Drg. NIL.

Ind. Cl. : 32-F<sub>20</sub>—[GROUP-IX(1)].  
Int. Cl.<sup>4</sup> : C 07 C 99/02.

169220

PROCESS FOR THE INDUSTRIAL PREPARATION OF AMINO ACIDS BY THE HYDROLYSIS OF PROTEINS IN A SULPHURIC ACID MEDIUM.

Applicant : LABORATORIES FLORK S.A., A FRENCH JOINT-STOCK COMPANY OF MONTGLANDIER, 63380 PONTAUMUR, FRANCE.

Inventor : MICHEL FLORK.

Application No. 225/Mas/87, filed on 27th March, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 6 Claims

Process for the preparation of amino acids by the hydrolysis of proteins in a sulphuric acid medium, comprising the steps of:

(a) charging a tank with a sulphuric acid solution of concentration at least equal to 12N;

(b) heating the solution to a temperature of between 100 to 130°C;

(c) adding to the heated solution, proteins to be hydrolysed and an additional amount of sulphuric acid simultaneously and continuously corresponding to that required for the neutralization of amine groups of amino acids originating from the hydrolysis of the proteins;

(d) continuing the hydrolysis reaction while maintaining the sulphuric acid concentration at least at 12N and the temperature of 100-120°C for a period sufficient to enable the proteins to dissolve and hydrolyze in the sulphuric acid;

(e) stopping the hydrolysis by adding water so as to lower the temperature to 55 to 65°C and to reduce the sulphuric acid concentration to a value of not more than 6N; and

(f) removing the excess sulphuric acid after hydrolysis by adding slacked lime to form a calcium sulphate precipitate and removing the precipitate in a known manner.

Compl. Specn. 13 Pages.

Drg. NIL.

Ind. Cl. : 32-E—[GROUP-IX(1)].  
Int. Cl.<sup>4</sup> : C 07 C 27/18; 27/20.

169221

PROCESS FOR THE PREPARATION OF POLYFLUOROALKYLTHIOMETHYL COMPOUND.

Applicant : ATOCHEM, A FRENCH BODY CORPORATE OF LA DEFENSE 10, 4 & 8 COURS MICHELET, 92800 PUTEAUX, FRANCE.

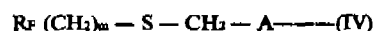
Inventors : (1) FREDERIQUE MARTY (2) EMILE ROUVIER (3) AIME CAMBON.

Application No. 8/Mas/87, filed on 6th January, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 4 Claims

A process for the preparation of a polyfluoro-alkylthiomethyl compound of the general formula :



in which  $R_f$  denotes a straight chain or a branched perfluoroalkyl radical containing from 2 to 16 carbon atoms,  $m$  is an integer from 1 to 4, and  $A$  denotes a hydroxyl group comprising reacting trioxymethylene with a polyfluoroalkanethiol of the formula



wherein  $R_f$  and  $m$  are as defined above, in a proportion of three moles of thiol per one mole of trioxymethylene at a temperature of upto 50°C, the said polyfluoroalkylthiomethyl of formula IV is recovered by known means.

Compl. Specn. 18 Pages.

Drg. 1 Sheet.

Ind. Cl. : 129 G [GROUP XXXV].  
Int. Cl.<sup>4</sup> : B 24 B 49/00; B 24 B 47/20; B 24 B 47/22.

169222

A GRINDING APPARATUS.

Applicant : AMSTED INDUSTRIES INCORPORATED, 205 N. MICHIGAN AVE. 44TH FLOOR CHICAGO, ILLINOIS 60601, U.S.A., A CORPORATION OF DELAWARE, U.S.A.

Inventor : CHRISTOPHER SIERADZKI.

Application No. 22/Mas/87, filed on 15th January, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

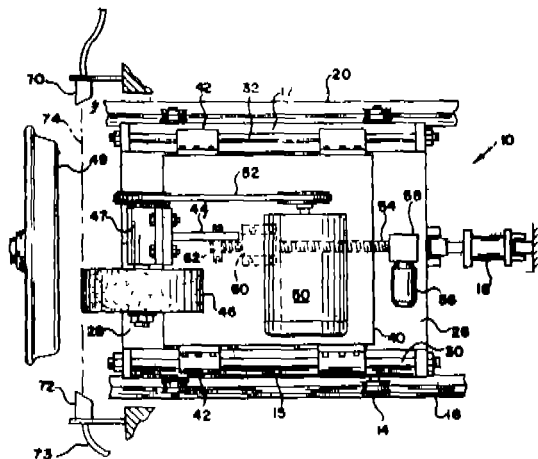
## 6 Claims

A grinding apparatus comprising a first carriage assembly mounted on a track assembly, a first drive means adapted to move said first carriage assembly laterally along said track assembly to an operating position and a fully retracted position.

a second carriage assembly mounted on said first carriage assembly, a second drive means mounted on said first carriage assembly and adapted to move said second carriage assembly laterally along said first carriage assembly,

a grinding wheel assembly mounted on said second carriage assembly, said grinding wheel assembly having a grinding wheel and a drive mechanism,

and a sensing mechanism for determining the position of said grinding wheel when said first carriage assembly is moved to said fully retracted position and for activating said second drive means to laterally move said second carriage assembly to adjust for wear to said grinding wheel.



Compl. Specn. 10 Pages.

Drg. 1 Sheet.

Ind. Cl.: 129-C—[GROUP-XXXV].

169223

Int. Cl.<sup>4</sup>: B 23 B 27/14 27/16 B 23 P 15/28 15/30.

#### AN IMPROVED BALANCE CUT BORING BAR

Applicant: CENTRAL MACHINE TOOL INSTITUTE, A GOVERNMENT OF INDIA SOCIETY, OF TUMKUR ROAD, BANGALORE-560 022, KARNATAKA STATE, INDIA.

Inventor: S.K. BARAPATRE.

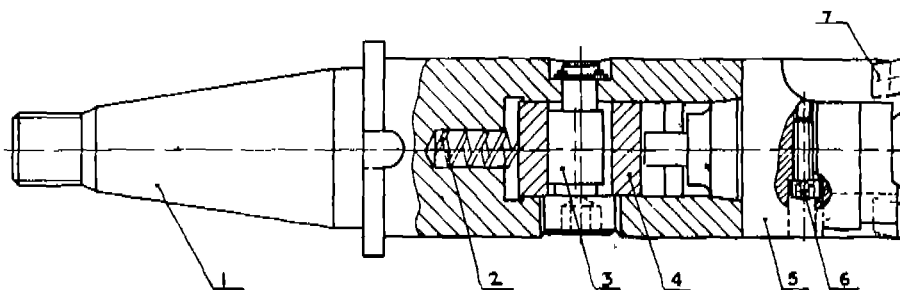
Application No. & Provisional Specification No. 31/Maa/87 filed on 19th January, 1987.

Complete Specification left on April 7, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

4 Claims

An improved balance cut boring bar comprising a shank (1) having a number of interchangeable cutting heads (5) secured thereto by means of a quick clamping mechanism consisting of cam (3), pull block (4) and compression helical spring (2) characterised in that each of said cutting head (5) having two identical cutting slides (9) with two cutting inserts (7) arranged at 180°C apart, a pin (10) is pre-fitted to said cutting head (5) for transmitting the torque from cutting head to shank during boring operation.



Provn. Specn. 7 Pages.  
Compl. Specn. 10 Pages.

Drg. 1 Sheet.

Ind. Cl.: 90 F [GROUP-XXXVI].

169224

Int. Cl.<sup>4</sup>: C 03 B 37/012.

#### A METHOD OF MANUFACTURING A PREFORM FOR MAKING OPTICAL FIBRES.

Applicant: CORNING GLASS WORKS, SULLIVAN PARK FR-212, CORNING, NEW YORK, N.Y. 14831, UNITED STATES OF AMERICA, A U.S. COMPANY.

Inventor: GEORGE EDWARD BERKEY.

Application No. 45/Maa/87, filed on 22nd January, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

16 Claims

A method of manufacturing preforms for making optical fibres, comprising providing at least one elongated cylindrical starting member, rotating said starting member(s) about the axis thereof, and

depositing on said starting member(s) from a plurality of soot generating means arranged in a series, a plurality of layers of glass soot to build up coating thereon, said coating having first and second ends, traversing said plurality of soot generating means along a path the length of which being greater than the length of said coating, a first portion of said path extending adjacent said starting member(s) such that soot from those of said soot generating means that are located on said first portion of said path is directed toward that portion of the length of said starting member(s) on which said coating is located.

Compl. Specn. 27 Pages.

Drgs. 8 Sheets.

Ind. Cl.: 33-A & H—[GROUP-XXXIII(3)].

169225

Int. Cl.<sup>4</sup>: B 22 D 11/00.

#### METHOD AND APPARATUS FOR CONTINUOUSLY CASTING STRIP METAL

Applicant: SMS SCHLOEMANN-SIEMAG AKTIENGESELLSCHAFT, OF EDUARD-SCHLOEMANN-STCRASSE 4, 4000 DUSSELDORF 1, FEDERAL REPUBLIC OF GERMANY, A GERMAN COMPANY.



Inventors : (1) GUNTER FLEMMING, (2) MANFRED KOLAKOWSKI, (3) HANS STREUBEL

Ind. Cl. : 69 N [GROUP—LIX (1)].  
Int. Cl.<sup>4</sup> : H 01 R 39/46.

169226

Application No. 98/Mas/87, filed on 13th February, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 9 Claims

A method for continuously casting strip metal comprising the steps of

positioning a dummy strip having a connection head in a narrow slotted mold having a flared inlet teeming zone necking down to a distal zone in which the walls of the mold are parallel and spaced by substantially the desired cross-sectional shape and dimensions of the strip being cast.

teeming liquid metal through a submerged nozzle having an orifice, into the flared zone of said mold to form a liquid metal bath and controlling the rate of teeming.

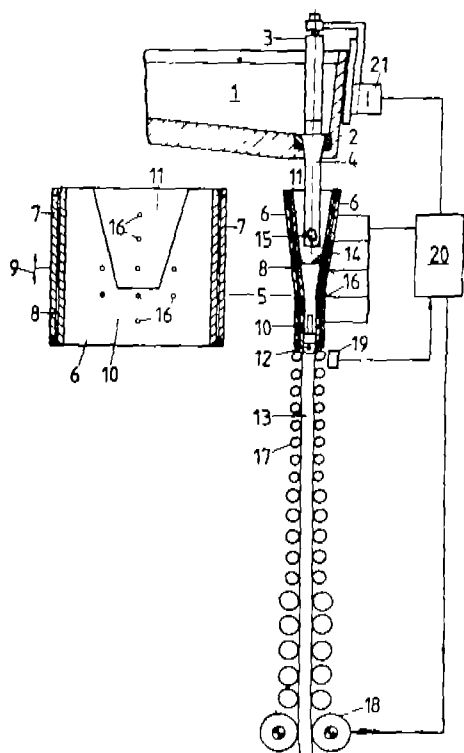
continuously detecting and monitoring the surface level of said bath.

withdrawing said dummy strip when the level of said bath rises above the neck between said flared and distal zones, and controlling the rate of withdrawal.

maintaining the relative teeming and withdrawal rates so that the surface level of said bath continues to rise.

increasing the withdrawal rate of the cast strip from the mold until fluid presence sensor indicates the presence of liquid metal in the core of said cast strip on the downstream side of said mold, and

sensing the presence of liquid metal within said cast strip at a point downstream of the distal end of said mold.



Compl. Specn. 21 Pages.

Drgs. 3 Sheets.

5—G—237 GI/91

### ARC INTERRUPTER.

Applicant : NORTHERN ENGINEERING INDUSTRIES PLC A BRITISH COMPANY OF NEI HOUSE, REGENT CENTRE, NEWCASTLE UPON TYNE NE3 3SB, ENGLAND.

Inventor : JAMES SPOONER.

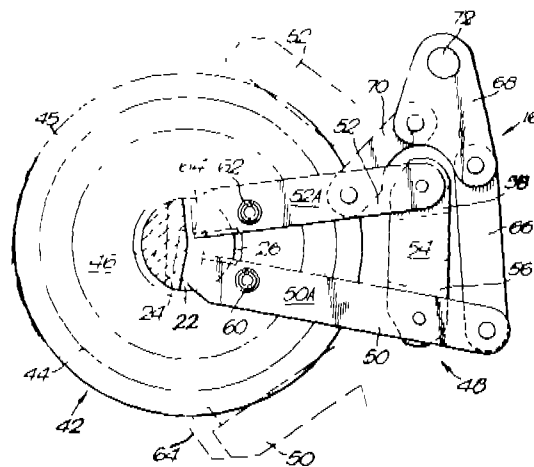
Application No. 120/Mas/87, filed on 23rd February, 1987.

Convention date 25th March, 1986, No. 86 07397 Great Britain.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch

### 13 Claims

An arc interrupter comprising a fixed contact and a movable contact assembly which, in a make position, is in engagement with said fixed contact whereby said movable contact assembly is connected in an openable main current path and which, in a break position, is completely disengaged from said fixed contact, characterized in that the fixed contact and fixed electrode have arcing surfaces which are spaced apart and between which runs an arc struck in the movement of said movable contact assembly to the break position, the distances between the fixed contact and said movable contact assembly in the break position being greater than the gap between said surfaces, said movable contact assembly having at least first and second main current carrying contact members pivotally mounted for movement between said make and said break positions, said first contact member, during opening of said main current path, being the last part of said movable contact assembly to disengage from said fixed contact.



Compl. Specn. 19 Pages.

Drgs. 3 Sheets.

Ind. Cl. : 69 N [GROUP—LIX (1)].  
Int. Cl.<sup>4</sup> : H 01 H 33/00.

169227

### ARC INTERRUPTER.

Applicant : NORTHERN ENGINEERING INDUSTRIES PLC., A BRITISH COMPANY OF NEI HOUSE, REGENT CENTRE, NEWCASTLE UPON TYNE NE3 3SB, ENGLAND.

Inventor : JAMES SPOONER.

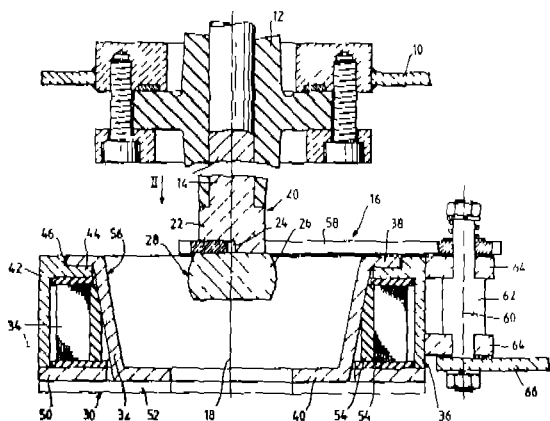
Application No. 121/Mas/87, filed on 23rd February, 1987.

Convention date 25th March, 1986, No. 86 07398; Great Britain.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 13 Claims

An arc interrupter comprising fixed and movable contacts, a fixed electrode having at least one flange, first and second coaxial arcing surfaces separated by an annular gap provided, respectively, by one of said contacts and said electrode, said first arcing surface being closer to the common axis of said arcing surfaces than said second arcing surface, an arc-driving coil surrounding said electrode, said coil being coaxial with said arcing surfaces and being electrically connected at one end to said electrode whereby said coil is included in series with said arcing surfaces in an arc current path at least during a later part of the opening of a main current path formed by said contacts in a make position and ferromagnetic material which forms part of a magnetic circuit produced by said coil when said coil is a part of said arc current path, said ferromagnetic material being arranged to support said flange of said electrode against distortion.



Compl. Specn. 16 Pages.

Drgs. 3 Sheets.

Ind. Cl.: 172 D\* [GROUP—XX].

169228

Int. Cl.<sup>4</sup>: D 01 G 15/62; D 01 G 17/00; D 01 B 7/06.

### A SILK REELING CHARKHA.

Applicant: CENTRAL SILK TECHNOLOGICAL RESEARCH INSTITUTE, CENTRAL SILK BOARD, MINISTRY OF TEXTILES, GOVERNMENT OF INDIA, B.T.M. LAYOUT, MADIVALA, BANGALORE-560 068.

Inventor: THAMMANNA NINGAPPA SONWALKAR.

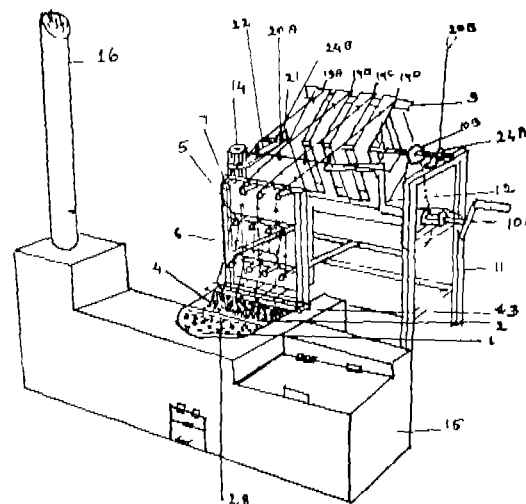
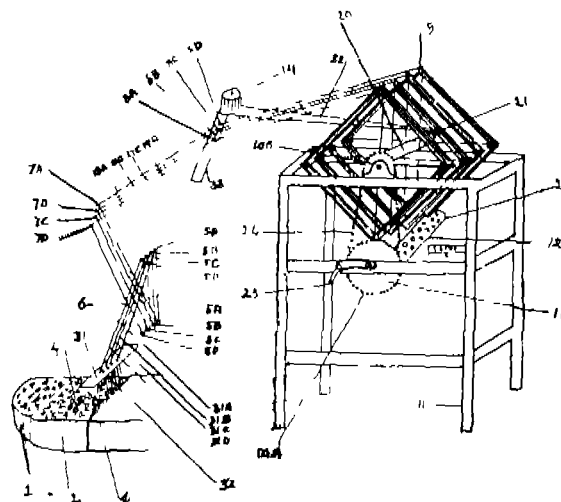
App. No. 338/Mas/87, filed on 11th May, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 6 Claims

An improved process for the manufacture of silk thread from mulberry cocoons comprising the steps of cooking cocoons in hot

water maintained at a Temperature range of 90°C to 100°C in a first basin, brushing the cooked cocoons to locate the free end of filaments, transferring the said cocoons to a second basin containing warm water, both first and the second basin being provided with means for heating, locating and connecting the filaments of cocoons to form threads, passing the said threads through a plurality of slub catchers to at least one pair of pulleys thereby forming croissure separately in respect of each of the silk threads, winding silk threads on to the reel and drying the said silk threads by known means.



Compl. Specn. 7 Pages.

Drgs. 5 Sheets.

Ind. Cl.: 172-D\* [GROUP—XX].

169229

Int. Cl.<sup>4</sup>: D 01 B 7/04.

D 01 G 17/00.

### A HAND SPINNING MACHINE FOR SILK YARN.

Applicant: CENTRAL SILK TECHNOLOGICAL RESEARCH INSTITUTE, CENTRAL SILK BOARD, MINISTRY OF TEXTILES, GOVERNMENT OF INDIA, B.T.M. LAYOUT, MADIVALA, BANGALORE-68, A STATUTORY BODY UNDER THE GOVERNMENT OF INDIA.

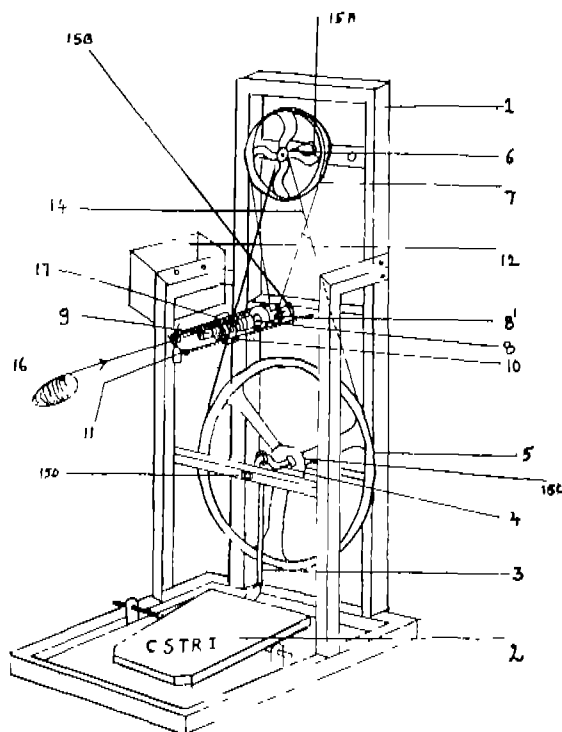
Inventor: THAMMANNA NINGAPPA SONWALKAR.

Application No. 463/Mas/87, filed on 25th June, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 3 Claims

An improved hand spinning machine for spinning of spun yarn from mulberry and non-mulberry pierced/cut cocoons comprising a pedal 2 movably mounted on the machine frame having a pedal wheel 5 rotatably mounted on the said frame and the said pedal connected to pedal wheel through a connecting rod 3 and crank 4, a step pulley 6 and a pulley 7 rotatably mounted over a common shaft and the said step pulley 6 is provided with means for transmitting the rotation from the pedal wheel to the step pulley, a spindle 8 through the spindle wharve 8' rotatably mounted over the frame with means for transmitting the rotation from the pulley 7, a bobbin 9 replaceably mounted over the said spindle 8 for winding the yarn, yarn guide 11 and a box 12 for keeping silk material positioned near the spindle wharve of the said machine frame



Compl. Specn. 5 Pages.

Drgs 3 Sheets.

Ind. Cl.: 97 C [GROUP—LIX (2)].

169230

Int. Cl.<sup>4</sup>: H 05 P 3/10

### AN ELECTRICAL HEATING CABLE

Applicant: THERMON MANUFACTURING COMPANY, A COMPANY INCORPORATED IN THE STATE OF TEXAS, USA, OF 100 THERMON DRIVE, SAN MARCOS, TEXAS-78666, UNITED STATES OF AMERICA.

Inventors: (1) DAVID CURTIS GOSS & (2) CHANDRAKANT MANISHANKAR YAGNIK

Application No. 840/Mas/87, filed on 20th November, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

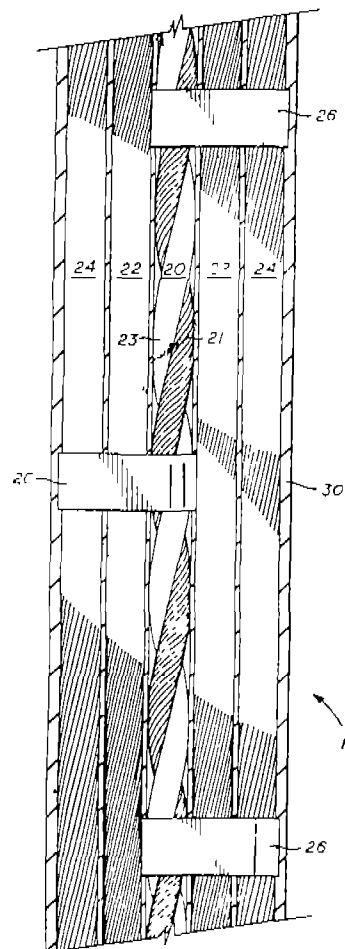
### 14 Claims

An electrical heating cable, comprising:

first and second electrical conductor means extending substantially parallel to and spaced from each other along the length of the cable for carrying electrical current;

heating means for generating heat comprising a non-metallic, electrically conductive material arranged substantially parallel to said electrical conductor means;

means for alternately electrically connecting said heating means to said first and second electrical conductor means to establish an alternating series of electrical connections between said first electrical conductor means and said heating means and said second electrical conductors means and said heating means, and protective cover encasing said electrical conductor means and said heating means.



Compl. Specn. 16 Pages.

Drgs. 2 Sheets.

Ind. Cl.: 32 F1 & 32 F3a.  
Int. Cl.: C 07 C 41/00.

169231

# PROCESS FOR THE PREPARATION OF GLYCIDYL ETHERS.

Applicant: CIBA-GEIGY AG, OF KLYBECKSTRASSE 141  
4002 BASLE, SWITZERLAND.

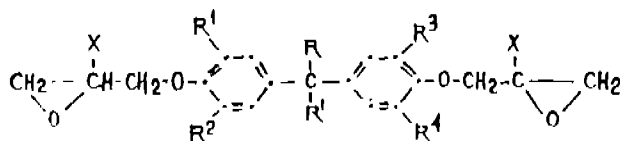
Inventors: ANDRE FIAUX & DINH LY NGUYEN.

Application No. 191/Del/85, filed on 8th March, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, New Delhi-110 005.

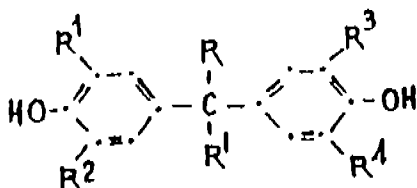
3 Claims

A process for the preparation of glycidyl ethers of the formula I.



Formula I

wherein each of R and R<sup>1</sup> independently of the other is a hydrogen atom, C<sub>1</sub>—C<sub>12</sub> alkyl, phenyl, cyclohexyl or cyclopentyl, each of R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> independently is a chlorine or bromine atom, and each of the two substituents X is a hydrogen atom or methyl, by reacting an epihalohydrin of the kind such as herein described with a compound of the formula Ia,



Formula Ia

in an aqueous medium and in the presence of a catalyst of the kind such as herein described which is stable in water to give the corresponding halohydrin compound and subsequently dehydrohalogenating said compound with aqueous alkali of the kind such as herein described to give a glycidyl ether of the formula I, characterised in that the process comprises using more than 1 but not more than 1.8 equivalents of epihalohydrin per 1 equivalent of reactive hydrogen atom in the compound of the formula Ia, removing excess epihalohydrin by azeotropic distillation from the halohydrin compound obtained in the first step, washing said compound by stripping with water and, in the second step, dehydrohalogenating it in an inert, substantially water-immiscible organic solvent of the kind such as herein described.

Compl. Specn. 11 Pages.

Drg. 1 Sheet.

Ind. Cl.: 39 C.  
Int. Cl.: C 01 F 7/02.

169232

# PROCESS FOR MAKING ALUMINA.

Applicant: THE BROKEN HILL PROPRIETARY COMPANY LIMITED, A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF VICTORIA, OF 140 WILLIAM STREET, MELBOURNE, IN THE STATE OF VICTORIA, COMMONWEALTH OF AUSTRALIA.

Inventors: DOMINICUS ADRIANUS JOHANNES SWINKELS AND KEVORK CHOUZADJIAN.

Application No. 371/Del/85, filed on 30th April, 1985.

Convention date 3rd May, 1984, PG. 4817/Australia.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, New Delhi-110 005.

12 Claims

A process for making alumina including the steps of digesting bauxite containing organic impurities of the kind such as herein described in sodium hydroxide solution to form a solution containing sodium aluminate and organic impurities, precipitating aluminium hydroxide from said solution to form liquor containing organic recycling said liquor to said digestion step, and calcining said precipitate of aluminium hydroxide to form alumina, characterised in that said solutions containing organic impurities is contacted with manganese dioxide in an amount effective to oxidise said organic impurities and to limit the accumulation of organic material in said process.

Compl. Specn. 30 Pages.

Drgs. 6 Sheets.

Ind. Cl.: 14 C & 70 A.  
Int. Cl.: H 01 M 10/28.

169233

# AN ALKALI METAL ENERGY CONVERSION DEVICE.

Applicant: CHLORIDE SILENT POWER LIMITED, A BRITISH COMPANY, OF DAVY ROAD, ASTMOOR, RUNCORN, CHESHIRE, WA 7 1 PZ, UNITED KINGDOM.

Inventors: STUART MACLACHLAN & CHRISTOPHER O'NEIL BELL.

Application No. 494/del/85, filed on 24th June, 1985.

Convention date 26th June, 1984, No. 8416228/U.K.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch New Delhi-5.

10 Claims

An alkali metal energy conversion device such as an alkali metal cell or a sodium sulphur cell having an external casing (18) a solid electrolyte element (10) in the casing to divide the interior into two electrode regions, an electrically insulating element (12) joined to the electrolyte element and metal member (23) joined to the external casing and secured by thermocompression bonding directly to the insulating member to seal off one of said electrode regions, said metal member (23) having a central opening (16) through which extends, insulatingly spaced from the metal member, a current collector.

Compl. Specn. 19 Pages.

Drgs. 2 Sheets.

Ind. Cl.: 32 F 2 b [IX (1)], 55 D: [XIX (1)],  
Int. Cl.: C 07 D 263/14.

169234

IMPROVEMENTS IN OR RELATING TO THE PROCESS FOR PREPARATION OF 3-ACYLOXY ISOXAZOLE DERIVATIVES.

Applicant: COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110 001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

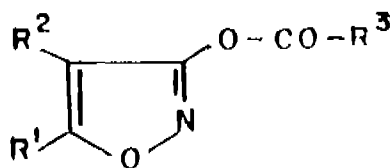
Inventors: RAJAT BARAN MITRA, AMMANAMANCHI SUBBA, GAUTAM DATTA RAY, SHRIPAD MURALIDHAR TOKE & SHAMRAO GANPATRAO.

Application No. 634/Del/85, filed on 2nd August, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch New Delhi-110 005.

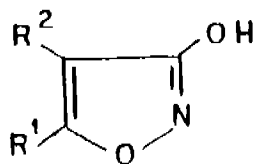
## 4 Claims

An improved process for the preparation of 3-Acyloxy isoxazole derivatives of formula (I)



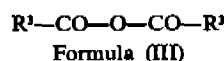
Formula (I)

wherein R<sup>1</sup> represents hydrogen, alkyl group containing 1-4 carbon atoms, straight or branched chain aryl group which may or may not be substituted, R<sup>2</sup> represents hydrogen, or alkyl radical, R<sup>3</sup> represent alkyl group having 1-4 carbon atoms, which may or may not be substituted which comprises reacting 3-hydroxy-isoxazole derivatives of the formula (II)



Formula (II)

with acid anhydrides of the formula (III)



Formula (III)

wherein R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> have the meanings given above in the presence of an aqueous solution of alkali hydroxide, extracting the product obtained in an organic solvent and purifying resultant the product obtained in by known methods.

USES—The products of the invention are useful in agriculture as fungicides.

Compl. Specn. 9 Pages.

Drg. 1 Sheet.

Ind. Cl.: 32 F.

Int. Cl.: C 07 C 143/155.

169235

A PROCESS FOR PREPARING AN N-ACYLATED AMINO HYDROCARBYL SULFONIC ACID DERIVATIVES.

Applicant: THE LUBRIZOL CORPORATION, OF 29400 LAKELAND BLVD. WICKLIFFE, OHIO 44092 U.S.A., A CORPORATION OF THE STATE OF OHIO, U.S.A.

Inventor: WILLAM ALBERT HIGGINS.

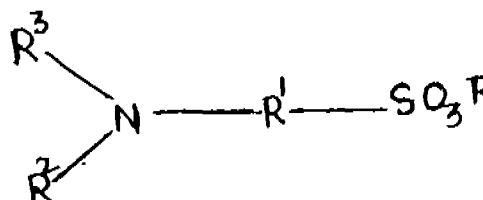
Application for Patent No. 926/Del/85, filed on 5th November, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch, New Delhi-110005.

## 19 Claims

A process for preparing an N-acylated amino hydrocarbyl sulfonic acid or acid derivatives characterised by the presence within the structure of at least one acyl,

acylimidoyl or acyloxy group attached to the amino nitrogen, which process comprises reacting at least one amino hydrocarbyl sulfonic acid of the formula I of the accompanying drawings



Formula I

wherein R is hydrogen, a cation or an alkyl or substituted alkyl group, R<sup>1</sup> and R is hydrocarbyl group of from 1 to 30 carbon atoms, R<sup>2</sup> and R<sup>3</sup> are independently hydrogen atoms or a monovalent hydrocarbyl or substituted hydrocarbyl group containing from 1 to 18 carbon atoms with the proviso that at least one of R<sup>2</sup> or R<sup>3</sup> is hydrogen, with carboxylic acid groups contained in an interpolymer of (i) at least one olefin monomer of the kind as interpolymer of (i) at least one olefin monomer of the kind as herein described and (ii) at least one alpha, beta-unsaturated acid of the kind as herein described or derivative thereof.

Compl. Specn. 59 Pages.

Drgs. 3 Sheets.

Ind. Cl.: 129 P G.

Int. Cl.: B 23 B 3/00 &amp; 11/00.

169236

A DEVICE FOR CONTROLLING RADIAL POSITION OF A TOOL RELATE TO ROTATIONAL AXIS OF WORKPIECE.

Applicant: THE CROSS COMPANY, OF 17801 FOURTEEN MILE ROAD, FRASER, MICHIGAN 48026, UNITED STATES OF AMERICA, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF MICHIGAN, U.S.A.

Inventor : RONALD EDWARD COMPTON.

Application for Patent No. 342/Del/86, filed on 16th April, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch, New Delhi-110 005.

### 11 Claims

A device for controlling the radial position of a tool relative to the rotational axis of a workpiece wherein the surface geometry of the workpiece is defined by a data matrix of axial, angular and radial position coordinates, the device comprising : angular position sensor means (54) for producing an angular position signal representative of the current angular position of the workpiece (42); axial position sensor means (66) for producing an axial position signal representative of the current axial position of the tool (56) relative to the workpiece; CNC means (58) for correlating the angular and axial position signals to the data matrix to produce a demanded radial position signal corresponding to the angular and axial position signals; a linear motor coupled to the tool for radial movement of the tool in accordance with a tool control signal; radial velocity sensor means (76) for producing a velocity signal representative of the radial velocity of the tool; radial position sensor means (74) for producing an actual radial position signal representative of the current radial position of the tool; and control means (80) for producing a tool feedback signal, producing a demand control signal derived from the demanded radial position signal, and comparing the demand control signal and the tool feedback signal to produce the tool control signal for controlling the radial position of the tool as a function of both tool position and velocity, characterized by :

the feedback signal having a velocity component derived from the radial velocity signal and a position component derived from the actual radial position signal.

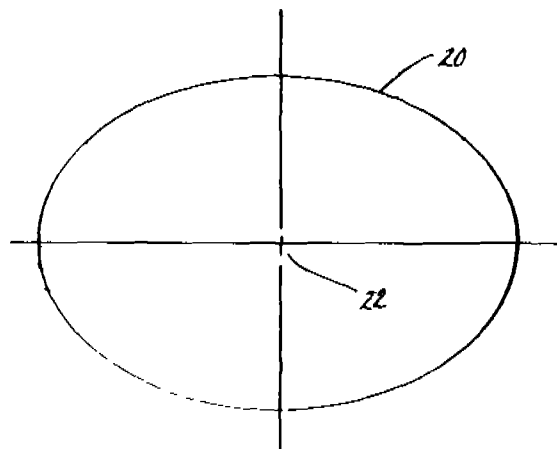


Fig. 1

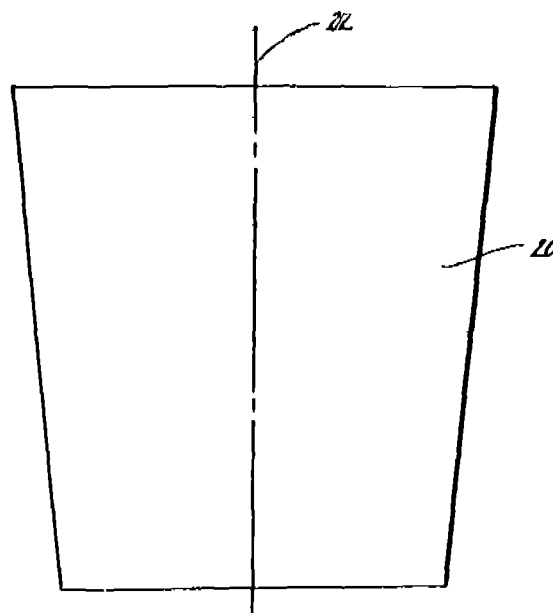


Fig. 2

Compl. Specn. 37 Pages.

Drgs. 9 Sheets.

Ind. Cl. : 129 J.

169237

Int. Cl.<sup>4</sup> : B 21 B 23/00.

### ROLL FORMING OF METAL ARTICLES FROM HOT ROLLED STEEL STRIP.

Applicant : PALMER TUBE MILLS (AUST.) PTY. LTD., A COMPANY INCORPORATED UNDER THE LAWS OF QUEENSLAND, OF 146 INGRAM ROAD, ACACIA RIDGE, 4110, QUEENSLAND, AUSTRALIA.

Inventors : ROSS LESLIE PALMER & LESLIE HAROLD PALMER.

Application for Patent No. 699/Del/86, filed on 31st July, 1986.

Convention date 31st July, 1985/(Australia)/PH 1735.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

### 11 Claims

A method for producing roll formed articles as herein described from hot rolled steel strip comprising the steps of :—

deforming a hot rolled steel strip to fracture and/or loosen a layer of mill scale adhered thereto;

shaping said steel strip to a predetermined shape in the presence of a roll forming lubricant;

characterized in that said shaped steel strip is subjected to a sizing step in the presence of a detergent to remove particles of mill scale and residual roll forming lubricant adhering thereto, said detergent acting as a lubricant for sizing rolls in said sizing region and coating said roll formed article.

Compl. Specn. 26 Pages.

Drgs. 4 Sheets.

Ind. Cl.: 130 I.

169238

Int. Cl.<sup>4</sup>: C 22 B 11/04.

#### METHOD FOR THE REFINING OF A PRECIOUS METAL.

Applicant: FINE METALS EXPORT CORPORATION PTY. LIMITED, A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF NEW SOUTH WALES, OF 9TH FLOOR, 2 O'CONNELL STREET, SYDNEY, NEW SOUTH WALES 2000, AUSTRALIA.

Inventor: EDWARD ERNEST DAVIS.

Application for Patent No. 807/Del/86, filed on 10th September, 1986.

Convention date 12th September, 1985/PH2406/Australia.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

#### 8 Claims

A method for the refining of a precious metal from a material of the kind such as herein described containing said precious metal which comprises;

- (a) inquartering in any conventional manner said material containing the precious metal with a known quantity of a base metal, e.g. copper, to form an alloy of the precious metal and base metal of known concentration;
- (b) subjecting the inquartered alloy to at least one parting with an acid such as herein described whereby said base metal is dissolved in said acid; and
- (c) filtering the precious metal from the solution thus formed.

Compl. Specn. 22 Pages.

Drgs. 2 Sheets.

Ind. Cl.: 9A & 129E.

169239

Int. Cl.<sup>4</sup>: B 22 F 1/00, 9/00.

#### A METHOD OF POWDER FORGING GALLIUM COATED ALUMINIUM OR ALUMINIUM ALLOY POWDER.

Applicant: THE BRITISH PETROLEUM COMPANY, A BRITISH COMPANY, OF BRITANNIC HOUSE, MOOR LANE LONDON EC2Y 9BU, ENGLAND.

Inventor: ALAN ROBERT BEGG.

Application for Patent No. 924/Del/86, filed on 20th October, 1986.

Convention date 15th, March, 1983/8307158/U.K.

Divisional to Application No. 168/Del/84, filed on 27th February, 1984.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

#### 5 Claims

A method of powder forging to produce a homogeneously textured and non-brittle article which method comprises heating a material which includes a powder composed of aluminium or an alloy thereof having a coating of gallium thereon at a temperature above 200°C under elevated pressure.

Compl. Specn. 10 Pages.

Drg. NIL.

Ind. Cl.: 86B.

169240

Int. Cl.<sup>4</sup>: A47 D9/00.

#### AN IMPROVED FOLDING BABY CRADLE.

Applicant: CHUNNILAL LAKHAI MISTRY OF C-2/10, TAKHATGARH-306 912, DIST. PALI, RAJASTHAN, HANSRAJ MAGRAJI MISTRY OF D-2/10, TAKHATGARH-306912, DIST. PALI, RAJASTHAN. SHANKARLAL TARACHANDJI MISTRY OF.

Inventors: CHUNNILAL LAKHAI MISTRY, HANSRAJ MAGRAJI MISTRY & SHANKARLAL TARACHANDJI.

Application for the Patent No. 1048/Del/86, filed on 1st December, 1986.

Complete Specification left on 11th November, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

#### 3 Claims

A folding cradle with telescopic system of sides for lifting up the cradle as claimed in the earlier Indian Patent Specification No. 109655, characterised in that there is provided U-shaped legs (11) at the lower portion of bottom tubes in place of the said telescopic system, and further comprising four locking strips (10) slidably fitted at the four bottom corners of the cradle base of firmly fixing the legs in position.

Provl. Specn. 5 Pages.

Drgs. 3 Sheets.

Compl. Specn. 8 Pages.

Ind. Cl. : 160 C [L II (3)].  
Int. Cl. : B 60 R—19/42.

169241

### SIDE BUMPERS FOR TWO WHEELER MOTOR VEHICLES.

Applicants : BAJAJ AUTO LTD. AKURDI PUNE-411 035, MAHARASHTRA, INDIA.

Inventors : (1) ANIL SAINI AND (2) CHARUDATTA YASHWANT DESHPANDE.

Application No. 14/Bom/1988, filed on 25th January, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay.

#### 4 Claims

A side bumper for a two wheeler motor vehicle being made of material having high impact strength as described herein, extending from the front to the rear of a side cowl of said vehicle characterised in that the said bumper which is secured rigidly to the lower frame of the chassis of the vehicle near the front end and rear end of the side cowl is a solid substantially flat member made of metal or non-metal such as high impact strength plastic, said bumper being strengthened by longitudinal and transverse ribs provided on its inner side facing the vehicle engine and wherein said bumper conforms to the profile of the cowl and is mounted close to the cowl.

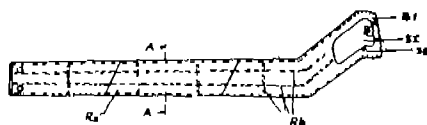


Fig. 2A

Compl. Specn. 12 Pages.



Fig. 2C

Drq. 1 Sheet.

Ind. Cl. : 196 B 1 Gr. [XXVI(4)].  
Int. Cl. : F 24 F—3/14.

169242

### A CELL TYPE AIR HUMIDIFICATION SYSTEM.

Applicants : AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION, P.O. POLYTECHNIC, AHMEDABAD-380 015.

Inventors : (1) SHANKERBHAJI PUJIRAM PATEL, (2) DHARNIDHAR DAMODAR MISTRI.

Application No. 199/Bom/1988, filed on 8th July, 1988.

Compl. after Prov. left on 7th July, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-13.

#### 4 Claims

A cell type air humidification system for industrial purpose, wherein air, under pressure, is caused to be passed through a humidification chamber, and the humidified air is adapted to be supplied to the space to be conditioned, characterised in that the said humidification chamber is adapted to accommodate a cell filled with

hygroscopic material, such as herein described, said hygroscopic material being opened in a known manner to increase its porosity to 90-98%, said material being in the form of a matrix, surface area of said hygroscopic material in the matrix form being 80-150 sq.m./sq.m., of face area of the chamber, the matrix being supported by frame of the cell; whereby in the event of small quantity of water under low pressure being allowed to trickle down the matrix of the said material the material is caused to be kept wet, thereby providing constantly an extended wet surface area for heat and mass transfer between the said wet surface and the air, as and when caused to be moved cross-currently through the wet surface.

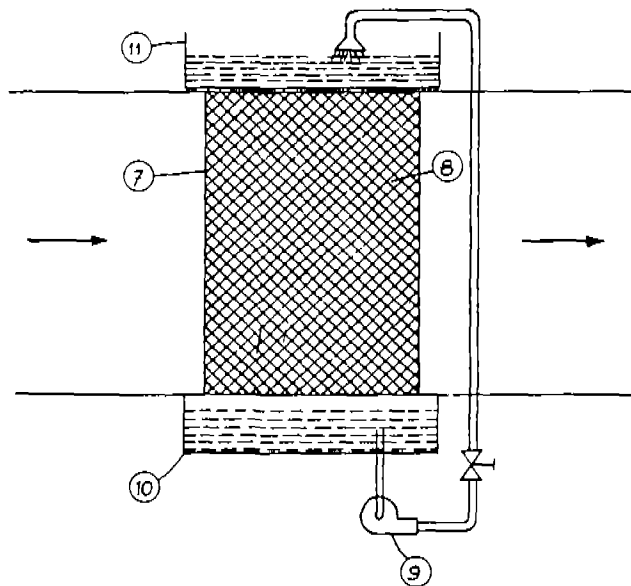


Fig. 2

Compl. Specn. 23 Pages.  
Prov. Specn. 8 Pages.

Drq. NIL.  
Drqa. 2 Sheets.

Ind. Cl. : 187 [LXI (2)]. 67 A+C [LI(2)].  
Int. Cl. : H 04 Q—9/00, H04 M-11/00.

169243

### A COMMUNICATION DEVICE.

Applicant & Inventor : ASHOK DONGRE, INDIAN NATIONAL OF 10, USHA, OPP. CENTRAL BANK OF INDIA, HANUMAN ROAD, VILE PARLE (EAST), BOMBAY-400 057, MAHARASHTRA, INDIA.

Application No. : 217/Bom/1988, filed on 2nd August, 1988.

Compl. after Prov. left on 6th July, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-13.

#### 3 Claims

A communication device comprising in combination :

sensing means, such as, smoke detector, humidity sensor or gas leak detector for sensing of a condition, such as, smoke, fire;

detecting means, such as, digital input circuit or voltage comparator circuit, connected to the said sensing means for detecting of an emergency condition;



processing means, such as, microprocessor circuit, single chip microcontroller circuit or microcomputer, connected to the output of said detecting means for processing of the said output; and

means, such as, audio cassette recorder/player or speech synthesizer circuit connected to said processing means for storing and transmitting a programmed message and to activate a communicating instrument, such as, telephone or telex instrument or an alarm output means, such as sirens, flashers and alarm annunciator panels.

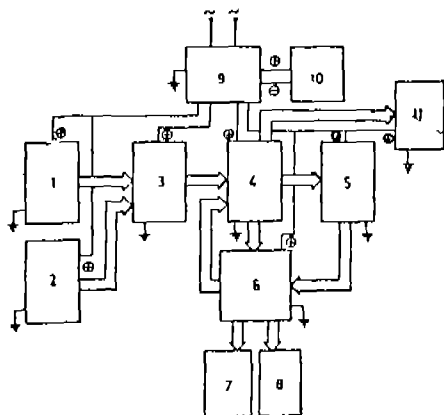


Fig. 1

Prov. Specn. 6 Pages.  
Compl. Specn. 12 Pages.

Drg. 1 Sheet.  
Drg. NIL.

Ind. Cl. : 32 B IX [(1)]. 169244  
Int. Cl. : C 07 C 5/00; 5/02, 5/13 B 01 j 21/16, 23/40.

#### A PROCESS FOR THE PRODUCTION OF P-XYLENE AND O-XYLENE BY THE CATALYTIC ISOMERISATION OF ALKYL AROMATIC HYDROCARBONS.

Applicants : INDIAN PETROCHEMICALS CORPN. LTD.  
P.O. PETROCHEMICALS, DISTRICT VADODARA-390 346,  
GUJARAT, INDIA.

Inventors : (1) ANAND BHIMARAO HALGERI, (2) RAMESH CHANDER SHARMA, (3) SUSHIL KUMAR, (4) RAMESH CHANDRA BHATT & (5) TURAGA SUNDARA RAMA PRASADA RAO.

Application No. 248/Bom/1988, filed on 30th August, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-13.

#### 10 Claims

A process for the production of p-xylene and o-xylene by the catalytic isomerisation of alkyl aromatic hydrocarbons which comprises subjecting a substantially C<sub>8</sub> alkyl aromatic hydrocarbon mixture to a temperature of from 250°C to 550°C in the presence of an improved high silica zeolite catalyst comprising a composite in acid form of amorphous silica and crystalline aluminosilicate in a silica to alumina weight ratio of from 90 to 200 and containing small amounts of platinum alone or platinum in combination with nickel and/or palladium, said composite being provided on an alumina support whereby the xylene content of said mixture is isomerised to

provide an isomeric mixture in equilibrium and the ethyl benzene present is simultaneously dealkylated, cooling the reaction medium, separating by any known means a lighter or top product consisting of a benzene-toluene mixture, withdrawing the heavier bottoms product rich in p-xylene and o-xylene bottoms and treating said bottoms product in any known manner to separate therefrom the p-xylene and o-xylene as individual products.

Compl. Specn. 32 Pages.

Drg. 1 Sheet.

Ind. Cl. : 40B [IV (1)]. 169245  
Int. Cl. : B 01 J 23/70, 23/78, 32/00.

#### PROCESS FOR PREPARING A NICKEL/SILICA CATALYST.

Applicant : HINDUSTAN LEVER LIMITED, HINDUSTAN LEVER HOUSE, 165/166, BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventors : (1) MARTHA JOHANNA PHILOMENA BOTMAN, (2) PETER NOOTENBOOM, (3) JOHANNES CORNELIS QUDEJANS, & (4) DIRK VERZIJL.

Application No. 350/Bom/1988, filed on 29th December, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-13.

#### 4 Claims

A process for preparing a nickel/silica catalyst which optionally contains cations of a lower Group II metal by continuously precipitating nickel ions from an aqueous salt solution optionally together with X-ions with an excess alkaline precipitating agent in a stirred reactor with a residence time between 20 and 120 seconds followed by continuous addition of an aqueous silicate solution optionally in a second reactor, collecting, drying and reducing of the precipitate characterized in that the residence time of suspension when adding the aqueous silicate solution is between 40 and 300, preferably between 60 and 240 seconds.

Compl. Specn. 16 Pages.

Drg. NIL.

Ind. Cl. : 50 A [VII (1)]. 169246  
Int. Cl. : F 25 D 7/00; 3/10.

#### A DEVICE FOR MAINTAINING HEAT LABILE FROZEN ARTICLES IN THE FROZEN CONDITION.

Applicant : DR. TRIDIB KUMAR GOSWAMI AND NAVEEN SETH, BOTH INDIAN NATIONALS AND OF KQUALITY FROZEN FOODS PVT. LTD. 254-C DR. ANNIE BESANT ROAD, WORLI, BOMBAY-400 025, MAHARASHTRA, INDIA AND KQUALITY FROZEN FOODS PVT. LTD., AN INDIAN COMPANY HAVING ITS REGISTERED OFFICE AT 135, NETAJI SUBHASH ROAD, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventor : Dr. TRIDIB KUMAR GOSWAMI.

Application No. 151/Bom/1989, filed on 9th June, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-13.

### 5 Claims

A device for maintaining heat labile frozen articles in the frozen condition, said device comprising a double-walled container, the inner wall at the mouth of said container being L-shaped in cross-section, a first air gap being provided between the inner wall and outer wall of said container, a double-walled closure which is T-shaped in cross section, the vertical flange of said T-shaped closure being disposed in the L-shaped inner wall at the mouth of said container such that the bottom of the vertical flange of said T-shaped closure confronts the horizontal limb of the L-shaped inner wall at the mouth of said container, the vertical flange of said T-shaped closure confronts the vertical limb of the L-shaped inner wall at the mouth of said container and the bottom of the horizontal flange of said T-shaped closure confronts the upper end of the mouth of said container, a second air gap being provided between the inner wall and outer wall of said T-shaped closure, the space between the walls of said container and closure being provided with a heat insulating material, a first gasket provided between the horizontal limb of the L-shaped inner wall at the mouth of said container and the confronting bottom surface of the vertical flange of said T-shaped closure, a second gasket provided between the upper end of the mouth of said container and the confronting bottom surface of the horizontal flange of said T-shaped closure and a liquid refrigerant spray header consisting of a vertically disposed first pipe passing through and supported in said closure, the lower end of said first pipe projecting down below said closure and disposed at the mouth of said container and the upper end of said first pipe projecting out of said closure and connectable to a liquid refrigerant supply, a second pipe horizontally disposed at the mouth of said container and supported on and connected to said first pipe, both the end of said second pipe being closed and a plurality of tubes horizontally disposed on both the sides of said second pipe, one end each of said tubes being supported on and connected to said second pipe and the other end each of said tubes being closed, said tubes being provided with a plurality of perforations at the lower surface thereof.

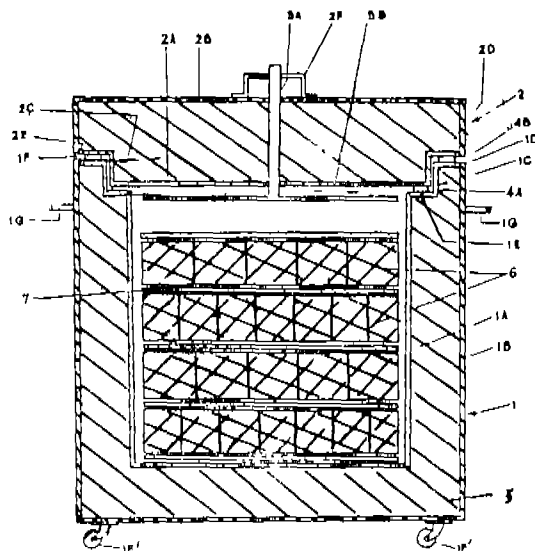


Fig. 3

Compl. Specn. 11 Pages.

Drgs. 4 Sheets.

Ind. Cl. : 80 H 201 D.  
Int. Cl. : B 01 D 21/24.

169247

### IMPROVED TUBE SETTLER MODULE FOR A WATER TREATMENT PLANT.

Applicant & Inventor : ANAND GOVIND BHOLE QR.NO. 7, VISVESVARAYA REGIONAL COLLEGE OF ENGG., CAMPUS NAGPUR-440 011, MAHARASHTRA, INDIA.

Application No. 161/Bom/1989, filed on 14th June, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-13.

### 2 Claims

The improved tube settler module for water treatment consisting of a number of tubes, the cross-section of the tubes being square, or regular hexagon or similar other shape and having a number of partition plates suitably dividing the cross-section of the said tube into two parts characterised in that the orientation of the tube while fixing in position being such that the corner portion (or the angular portion) having V shape and not the flat portion, forms the lower part of the tube, the lower two sides being equally inclined to horizontal.

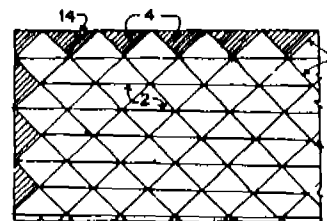


Fig. 3

Compl. Specn. 5 Pages.

Drg. 1 Sheet.

Ind. Cl. : 76 H [LXIV].  
Int. Cl. : G 09 f 3/03.

169248

### AN IMPROVED POSITIVELY DOUBLE DEAD LOCKABLE TAMPER EVIDENT SEAL.

Applicant : RANJEET SINGH JASWAL, AN INDIAN CITIZEN, 404 ACROPOLIS, LOKHANDWALA COMPLEX ANDHERI (WEST), BOMBAY-400 058, MAHARASHTRA, INDIA.

Application No. 215/Bom/89, filed on 2nd August, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-13.

### 5 Claims

An improved positively double dead lockable tamper evident seal comprising a combination of an insert (5) having a piston (5B) carrying a pair of spaced catches (5C, 5E), a stem (5G) ending in a flange (5F) forming a dust cap below said piston and a casing (2) for said

piston, said casing (2) having a pair of matching spaced latches (2C, 2B) being linked to said flange (5F) by an integrally attached cord or the like (4) wherein said stem (5G) forms a core for twisting therearound a sealing wire or the like (6) wound around a meter or the like to be sealed characterised in that said piston (5B) respectively carries a groove forming first catch (5C) in its middle, and the base of said piston being provided with or without yieldable arm forming a shield for said stem, the gap formed between the periphery of said yieldable arm of base of said piston and said flange forming a second catch (5E) on said insert and said casing being provided on its inner wall a pair of spaced matching latches (2C, 2D) adapted to get into complementary and positively double dead locked and interlocked engagement with said catches on said insert being slid into said casing to form a tamper evident seal.

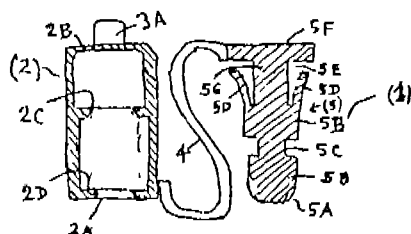


Fig. 2

Compl. Specn. 7 Pages

Drg. 1 Sheet.

Ind. Cl.: 50D [VII (1)].

169249

Int. Cl.: F 25 D—17/00, F 25 B—15/10.

#### A DEVICE FOR PRE-COOLING AND FREEZING OR HARDENING PERISHABLE FOOD ARTICLES.

Applicants: DR. TRIDIB KUMAR GOSWAMI & NAVEEN KUMAR SETH OF KQUALITY FROZEN GOODS PVT. LTD., 254C DR. ANNIE BESANT ROAD, WORLI, BOMBAY-400 025, AND KQUALITY FROZEN FOODS PVT. LTD. AT 135 NETAJI SUBHASH ROAD, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventors: (1) DR. TRIDIB KUMAR GOSWAMI & (2) NAVEEN KUMAR SETH.

Application No. 216/Bom/1989, filed on 3rd August, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-13.

#### 5 Claims

A device for pre-cooling and freezing or hardening perishable food articles consisting of a double walled freezing or hardening compartment provided with a liquid refrigerant spray header consisting of a vertically disposed first pipe passing through and supported at the top of said freezing or hardening compartment, the lower end of said first pipe projecting down below the top of said freezing or hardening compartment and the upper end of said first pipe projecting out of the top of said freezing or hardening compartment and connectable to a liquid refrigerant supply, a second pipe horizontally disposed in said freezing or hardening compartment below the top thereof and supported on and connected to said first pipe, both the ends of said second pipe being closed and a plurality of tubes horizontally disposed on both the sides of said second pipe, one end of each of said tubes being supported on and connected to said second pipe and the other end of each of said tubes being closed, said tubes

being provided with a plurality of perforations at the lower surface thereof, said freezing or hardening compartment being further provided with a double walled vapour outlet at the bottom of a side wall thereof and a double walled pre-cooling compartment; provided with a double vapour inlet at the bottom of a side wall thereof confronting said side wall of said freezing or hardening compartment, said vapour inlet being coupled to said vapour outlet, said pre-cooling compartment being further provided with a vapour vent at the top thereof, a heat exchanger coil one end of which is fitted in said vapour vent and the other end of which is provided with a pressure relief valve, the space between the double walls of said compartments and vapour outlet and inlets being provided with a heat insulating material, said compartments each being open at the front side thereof and provided with a hinged door at the front side thereof, said door being provided with a locking means and a handle, the inner surface of said door and confronting abutting surface at the front side of the respective compartment being provided with heat insulating gaskets, said compartments each being provided with a plurality of horizontally disposed seat means located therein one below the other in spaced apart relationship to support trays loaded with perishable food articles to be frozen or hardened and to be precooled, respectively.

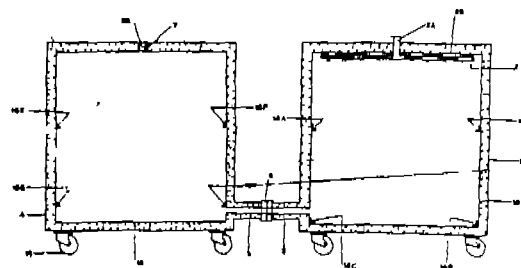


Fig. 2

Compl. Specn. 14 Page.

Drgs. 3 Sheets.

Ind. Cl.: 55E2 + E4 [XIX].

169250

Int. Cl.: C 12 p-21/00.

#### A PROCESS FOR THE PRODUCTION OF A NEW GLYCOPEPTIDE ANTIBIOTIC NOGABECIN F FROM A MICROORGANISM NAMED NOCARDIA SPECIES Y-86,20095 (CULTURE NUMBER HOECHST INDIA LIMITED, Y-86,20095), ITS MUTANTS OR VARIANTS AND PHARMACEUTICALLY USEFUL SALTS THEREOF.

Applicant: HOECHST INDIA LTD. HOECHST HOUSE, NARIMAN POINT, 193, BACKBAY RECLAMATION, BOMBAY-400 021, MAHARASHTRA, INDIA.

Inventors: (1) SURESH RUDRA NADKARNI, (2) TRIPITI KUMAR MUKHOPADHYAY, (3) MAHESH VITHAL BHAI PATEL, (4) RAVI GAJANAN BHAT, (5) BIMAL NARESH GANGULI (6) JURGEN BLUMBACH & (7) HANS WOLFRAM FEHLHABER.

Application No. 3/Bom/90, filed on 9th January, 1990.

Appropriate Office for the Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, Bombay-13.

#### 6 Claims

A process for the production of a new glycopeptide antibiotic Nogabecin F from a microorganism named *Nocardia* species

Drg. NIL.  
Drgs. 2 Sheets.